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A23P7

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

2410
Plans - Prescott

TIMBER MANAGEMENT PLAN

PRESCOTT WORKING CIRCLE

PRESCOTT NATIONAL FOREST
REGION 3

SECOND REVISION
July 1, 1964 THROUGH June 30, 1971

APPROVED: December 8, 1965

U.S. GOVERNMENT PRINTING OFFICE: 1964—O-726-131

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PRESCOTT NATIONAL FOREST

REGION 3

1965

Prepared By:

Horace D. Morgan, Forester — March 15, 1964

Approved By:

Forest Supervisor — 11/17, 1964

Regional Forester — 12-8-65, ~~1964~~

* 1926 & 1954 Plans

Reviewed By:

Divisions	Forest: Initials	Forest: Date	Regional Office: Initials	Regional Office: Date
Timber Management		9/15/64		6/16/65
Engineering		9/24/64		7/22/65
Multiple Use		9/15/64		7/1/65
Ranger Districts				
Chino Valley	JDS	11/3/64		
Crown King		10/12/64		
Granite		9/8/64		
Prescott		9/30/64		
Verde		11/5/64		
Walnut Creek		11/5/64		

PREFACE

The Prescott Working Circle consists of 1,247,572 acres of National Forest land. Of the total, 61,031 acres are classified as operable timberland. The balance of the working circle is chaparral, woodland, desert brushland, grassland, and inoperable timberland.

All-aged management has been the policy in the past. The objectives were to harvest the virgin timber and sustain an annual allowable yield through intermediate cuts. Little cultural work has been done except through intermediate cutting. Reforestation has depended entirely on natural means with no provisions for artificial reforestation.

As the working circle exists today, there are three major problems in timber management. They are (1) land ownership pattern, (2) reforestation, (3) utility pole production.

The commercial forest is located on one of the highest mineralized areas in Arizona. Legitimate mining is recognized as one of the multiple uses and is encouraged. The location of mineral claims for other than mining purposes presents a problem. Claims believed to be invalid are being examined as rapidly as possible.

Patented homesteads and mining claims within the National Forest Boundary increase timber sale administration costs. As patented land is developed for homesites, more intensive slash treatment will be required on the adjoining Forest lands. This will be necessary for aesthetics and to reduce the fire hazard.

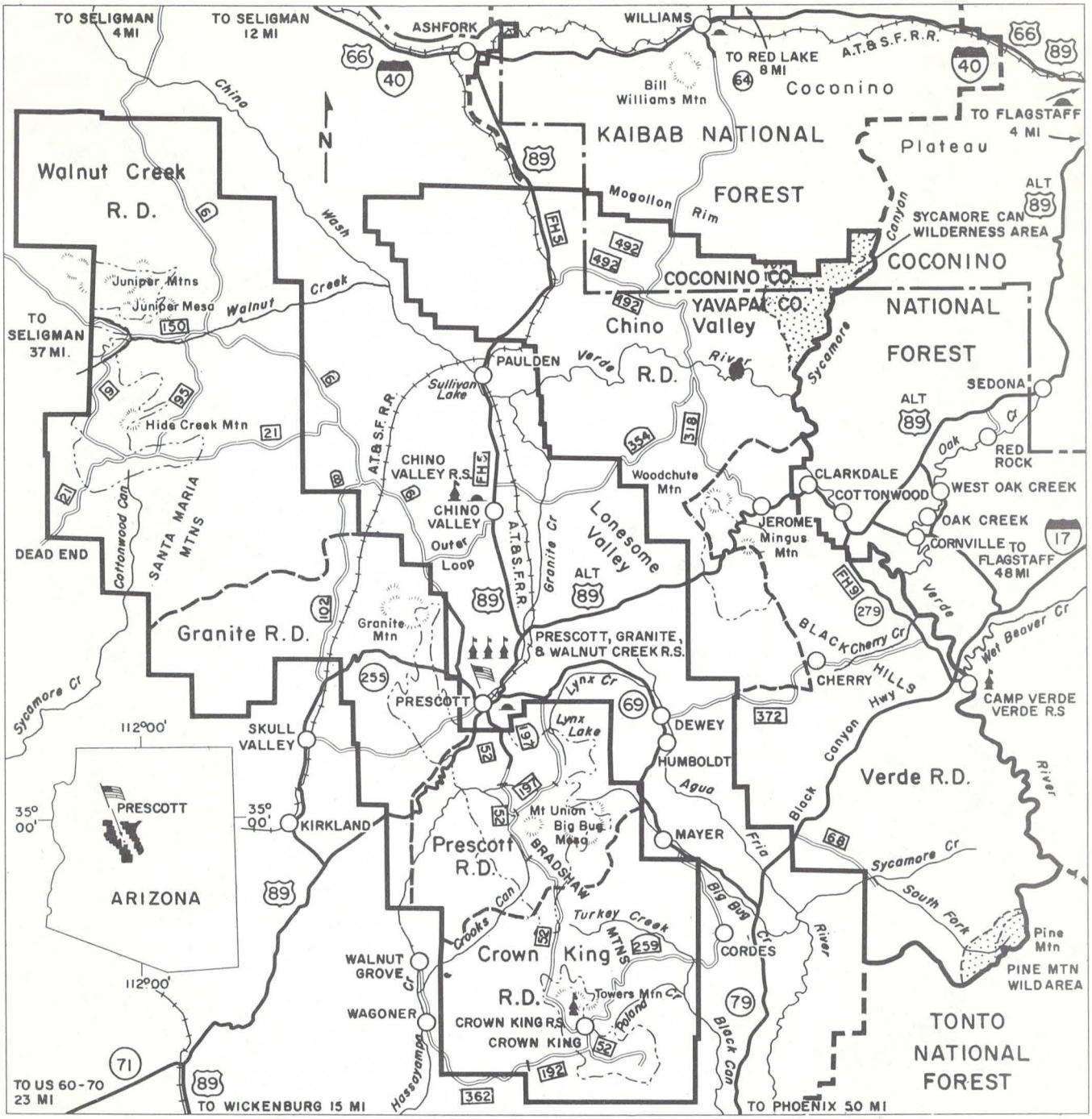
The mean annual precipitation is 19.5 inches for the working circle. An estimated 50% occurs during the main growing season, the months of May, June, July, and August. The bulk of the precipitation occurs during July and August. This produces late germination in the ponderosa pine type.

Regeneration will be obtained in the future by artificial means when natural regeneration fails. In areas where competing species are occupying timber sites, a weeding program will be conducted in conjunction with seedbed preparation. An attempt will be made to utilize the winter and early summer moisture through seeding programs. Seed-spot seeding of an area will be done if natural seeding does not occur during the five-year period following a regeneration cut. Planting of nursery stock will be done as appropriate.

The Prescott technical working group contains 28,817 acres that will produce grade 6 or better ponderosa pine utility poles. This plan sets the annual allowable cut for utility poles at 5,000 poles. This allowable cut is only one-eighth of the working group's potential production rate (Table 7-A).

The growth rate in this working group is below the site potential because the predominant 41-80 year old stands need thinning to provide adequate growing space. The insect risk and fire hazard make it undesirable to leave thinnings over 5" on the ground. Therefore, a market for 6- to 10-inch d.b.h. stems must be developed before the full potential utility pole allowable cut can be realized.

This Timber Management Plan is the first in converting from all-aged to even-aged management of the timber resource on this working circle. The prescriptions that are contained in this plan are guides and require considerable insight on the part of the administrative officers. The prescriptions and recommendations are subject to change due to new techniques and advances in technology.



C.D. Buell August, 1963

LOCATION MAP
PRESCOTT WORKING CIRCLE
PRESCOTT NATIONAL FOREST
R-3

Scale 3 0 3 6 9 12 15 Miles

LEGEND

- Forest boundary
- Ranger district boundary (coincides with block boundary)
- County line
- Working circle boundary (coincides with forest boundary)
- Supervisor's headquarters
- Ranger station
- Sawtimber zone boundary

ROADS: 66 Federal; 17 State; 297 Forest

- Railroad
- Mfg. facilities

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II. SUMMARY OF THE PLAN

A. Management Objectives for the Working Circle

The past management objectives were designed to produce the maximum volume of quality sawtimber and utility poles that the stands were capable of producing under all-aged management. Future management will be based on even-aged stands which will be cut under area controls.

1. The principal objective of management of the commercial forest lands will be to obtain continuous production at a level as high as is economically practicable, giving consideration to both quantity and quality in accordance with the principles of multiple use.

2. During the first cutting period, the initial harvest of the remaining 3,000 acres of commercial virgin timberland will be completed.

3. The Administrative Working Group will be managed to protect, improve, harvest, and maintain stands of timber which will be adequate for the use of the area.

4. Cutting on the Crown King Ranger District will be encouraged. The commercial timber on the District is presently classified as inoperable due to lack of main access roads.

5. The full allowable cut of the Working Circle will be made available to wood using industries.

6. Timber management will be even-aged and cutting will be controlled by area with volume checks.

7. Waste will be reduced in sawtimber operations, utility pole cutting, and noncommercial thinnings. These operations will be integrated closely.

8. The quality of the existing stands will be improved through the selection of the best quality leave trees during intermediate commercial cuts and noncommercial thinnings.

9. Overstocked stands will be reduced to an optimum 57% of Meyer's full basal area stocking (T.B. 630). Understocked stands will be brought to optimum stocking through growth, planting, or direct seeding.

10. Disease will be controlled in stands through cutting practices.

11. Insect damage will be kept at a minimum through increased utilization and slash treatment. Early detection of epidemic populations will be possible through constant observations.

12. The Working Circle has been divided into compartments ranging in size from 300 to 5,000 acres. Each timbered compartment will be mapped by Forest type, stand age, stand condition, and site index. Silvicultural prescriptions will be prepared for each stand. This will be completed prior to the next revision of this management plan.

13. Growth data will be developed for each compartment based on stand age, site index, and basal area stocking.

14. A balance of 20-year age classes will be attained by area and site quality within the working circle. At least one full rotation period will be required to get this distribution.

B. Area and Volume Summaries

1. Ownership Status

Table 1

Ownership Class	All Lands Acres	Commercial Forest Lands			
			Net Volume - M Bd. Ft.		
		Acres	Scribner	International 1/4"	Net 1/ M Cu. Ft.
National Forest	1,247,572	92,449	213,181 2/	245,158	55,848
Private	157,643	12,799	29,745	34,207	7,818
Total	1,405,215	105,248	242,926	279,365	63,666

1/ Sawtimber - 11"+ D.B.H.

2/ Estimated

Table 2

Net Volumes Sawtimber and Pole Timber (Does Not Include Utility Poles)

Age Classes By Working Groups	Acres	Sawtimber - 11" and Over DBH to 8" Top			Poletimber 5-10" DBH	Total
		Scribner	International 1/4"			
		Bd. Ft.	Bd. Ft.	Cu. Ft.	Cu. Ft.	Cu. Ft.
Prescott						
41-60	9,745	21,081,279	24,243,471	4,860,713	3,774,888	8,635,601
61-80	18,933	45,299,984	52,094,981	12,878,065	5,857,775	18,735,840
81-100	1,810	5,647,891	6,495,075	1,208,183	453,214	1,661,397
101-120	559	1,354,534	1,557,714	301,309		301,309
Nonstocked	3,006					
Total Operable	34,053	73,383,688	84,391,241	19,248,270	10,085,877	29,334,147
Inoperable	24,915	58,606,188	67,397,116	15,323,272	7,954,278	23,277,550
Total	58,968	131,989,876	151,788,357	34,571,542	18,040,155	52,611,697
Walnut Creek						
41-60	6,203	12,378,436	14,235,201	2,601,832	600,834	3,202,666
61-80	5,201	14,941,107	17,182,273	3,620,686	928,690	4,549,376
81-100	2,534	3,509,574	4,036,010	784,084	166,030	950,114
101-120	634	705,959	811,852	175,466		175,466
121+	1,900	3,732,911	4,292,848	955,111	228,000	1,183,111
Total Operable	16,472	35,267,987	40,558,184	8,137,179	1,923,554	10,060,733
Inoperable	1,870	4,003,670	4,604,221	923,780	218,790	1,142,570
Total	18,342	39,271,657	45,162,405	9,060,959	2,142,344	11,203,303

Net Volumes Sawtimber and Pole Timber (cont'd)

Age Classes By Working Groups	Acres	Sawtimber - 11" and Over DBH to 8" Top			Poletimber 5-10" DBH	Total
		Scribner	International 1/4"			
		Bd. Ft.	Bd. Ft.	Cu. Ft.	Cu. Ft.	Cu. Ft.
Administrative						
41-60	3,256	6,884,666	7,917,366	1,548,501	999,235	2,547,736
61-80	5,779	14,351,602	16,504,342	3,944,049	1,665,779	5,609,828
81-100	837	2,907,929	2,309,118	331,606	124,620	456,226
101-120	331	231,981	266,778	58,508		58,508
121+	303	649,481	746,903	165,756	36,360	202,116
Total Operable	10,506	24,125,659	27,744,507	6,148,420	2,825,994	8,974,414
Inoperable	4,633	9,807,320	11,278,418	2,522,715	1,264,809	3,787,524
Total	15,139	33,932,979	39,022,925	8,671,135	4,090,803	12,761,938
SUMMARY						
Total Operable	61,031	132,777,334	152,693,932	33,533,869	14,835,425	48,369,294
Total 1/ Inoperable	31,418	72,417,178	83,279,755	18,769,767	9,437,877	28,207,644
Total Commercial	92,449	205,194,512	235,973,687	52,303,636	24,273,302	76,576,938

1/ Timber values at present are not sufficient to merit the construction of a road into the Crown King area. Therefore, the entire 20,095 acres are listed as inoperable. Excessive slope, rough topography, and low volume stands were the reasons for the balance of the inoperable timber.

Table 2 - continued

Table 3

Net Volume for Utility Poles - Prescott
Technical Working Group 1/

Age Class	Acres	Utility Poles - A.S.A. Standards				
		Pieces	Linear Feet	Scribner Bd. Ft.	International 1/4" Bd. Ft.	Cu. Ft.
41-60	9,606	70,601	1,590,845	1,577,940	1,814,631	735,647
61-80	17,541	70,335	1,588,645	2,085,279	2,398,071	881,363
81-100	1,670	24,418	530,308	393,769	452,834	223,095
101-120 2/	557	5,503	132,539	223,384	256,892	83,717
Total Operable	29,374	170,857	3,842,337	4,280,372	4,922,428	1,923,822
Non Pole 3/ Producing	6,045					
Inoperable	23,549	133,717	3,120,809	3,706,466	4,262,436	1,620,069
Total 4/ Commercial	58,968	304,574	6,963,146	7,986,838	9,184,864	3,543,891

1/ Percentage Distribution of Utility Poles by Lengths.

Length Class	Percent
16' to 20'	50.5
16' to 22'	74.3
16' to 25'	84.8
25' +	15.2

2/ Mixed-conifer type - includes 362 stems, 10,862 linear ft.; 48,135 Scribner Bd. Ft.; 55,376 International $\frac{1}{4}$" Bd. Ft.; and 8,689 Cu. Ft. of white fir which is not presently classified as utility pole material.

3/ Non pole producing - includes 3,006 acres of nonstocked lands. There are 1,673 acres of marginal sites that can not produce poles of A.S.A. standards. Also, there are 1,366 acres of inoperable land which were classified as non pole producing.

4/ Not included in Table 2 - utility poles were computed separately from sawtimber. Diameter at breast height ranges from 8" to 18" for utility poles.

Table 4

Commercial Forest Lands by Forest Type

Forest Type	Acres	Net Scribner Bd. Ft. 1/	Net International 1/4 " Bd. Ft. 1/	Net Cu. Ft. 1/
Ponderosa Pine				
Operable	60,356	133,449,236	153,466,621	34,552,259
Inoperable	29,264	65,690,056	75,543,564	17,720,684
Total	89,620	199,139,292	229,010,185	52,272,943
Mixed-Conifer				
Operable	675	3,608,469	4,149,739	905,432
Inoperable	2,154	10,433,589	11,998,627	2,669,152
Total	2,829	14,042,058	16,148,366	3,574,584
Total				
Operable	61,031	137,057,705	157,616,361	35,457,691
Inoperable	31,418	76,123,645	87,542,192	20,389,836
Total Commercial	92,449	213,181,350	245,158,553	55,847,527

1/ Sawtimber 11"+ DBH - includes utility poles over 11" DBH

3. Other Forest Lands, National Forest Only

Table 5

Land Class or Condition Class	Acres	M Bd. Ft. Net Scribner	M Bd. Ft. Net International 1/4"	Net M Cu. Ft.
Areas Within Sawtimber Zone				
Woodland	1,476			
Grassland	670			
Brush	3,006			
Total	5,152			
Administrative	2,160			
Total Within Sawtimber Zone	7,312			
Areas Outside Sawtimber Zone 1/				
Pine Mountain Wild Area				
Timbered 2/	4,897	12,130	13,949	2,669
Woodland-Chaparral	2,421			
Grassland	765			
Total	8,083	12,130	13,949	2,669
Sycamore Primitive Area				
Yavapai County				
Woodland-Chaparral	8,320			
Coconino County				
Woodland-Chaparral	10,655			
Total	18,975			
Other Forest Lands				
Yavapai County				
Woodland-Chaparral	946,818			
Grassland	77,037			
Desertbrush	63,830			
Total	1,087,685			
Coconino County				
Woodland-Chaparral	30,423			
Grassland	2,645			
Total	33,068			
Total Outside Sawtimber Zone	1,147,811	12,130	13,949	2,669
Total Other Forest Lands	1,155,123	12,130	13,949	2,669
Total Commercial Timberlands	92,449	213,181	245,158	55,848
Total Working Circle	1,247,572	225,211	259,107	58,517

1/ All acres and volumes are in Yavapai County unless otherwise specified.

2/ Volumes estimated by using Working Circle's weighted per-acre averages.

C. Growth

1. Periodic Annual Increment

Table 6

Includes Utility Pole Volume

Forest Type	Total Per Type: Net MM Bd. Ft. Scribner	Total Per Type: Net MM Bd. Ft. International 1/4"	Total Per Type: Net MM Cu. Ft.	Weighted Per Acre Averages: Net Bd. Ft. Scribner	Weighted Per Acre Averages: Net Bd. Ft. International 1/4"	Weighted Per Acre Averages: Net Cu. Ft.
Ponderosa pine	3.030	5.271	1.274	53	92	22
Mixed-Conifer	.054	.088	16	81	131	24
By Working Circle	3.084	5.359	1.290	53	92	22

2. Potential Mean Annual Increment

Table 7

Sawtimber and Utility Pole Volume

Forest Type	Total Per Type: Net MM Bd. Ft. Scribner	Total Per Type: Net MM Bd. Ft. International 1/4"	Total Per Type: Net MM Cu. Ft.	Weighted Per Acre Averages: Net Bd. Ft. Scribner	Weighted Per Acre Averages: Net Bd. Ft. International 1/4"	Weighted Per Acre Averages: Net Cu. Ft.
Ponderosa pine	5.265	9.299	2.347	87	155	38
Mixed-Conifer	.124	.203	37	185	301	56
By Working Circle	5.389	9.502	2.384	88	156	39

Table 7-a

Utility Poles 1/

Total Acres	Net Pieces	Net Linear Feet	Net Bd. Ft. Scribner	Net Bd. Ft. International ¼" Rule	Net Cu. Ft.
29,374	43,474	1,521,573	2,284,122	2,626,740	1,011,053

1/ See Section C-5 of Appendix. This material is included in Table 7.

D. Regulation

Item	Prescott Working Group	Walnut Creek Working Group	Administrative Working Group		Summary
			Prescott Unit	Walnut Creek Unit	
1. Control 1/	Area	Area	Area	Area	
2. Cutting Period					
Sawtimber	20 years	20 years	20 years	20 years	
Pulpwood	10 years	10 years	10 years	10 years	
3. Rotation Age	90 years	110 years	190 years	190 years	
4. Rotation Period	100 years	120 years	200 years	200 years	
5. Acres to be entered or cut per year	1,702	823	388	136	3,049
6. Acres to be regenerated per year	340	137	39	14	530
7. Acres to be regenerated per cutting period	6,810	2,745	778	273	10,606
8. Acres to 2/ be examined or cut for pulpwood per year	3,405	1,647	778	273	6,103
9. Acres to receive an intermediate cut each year	1,362	686	349	122	2,519

1/ Area control with volume checks.
2/ This acreage is not part of the control for area regulation.

E. Allowable Cut and Cutting Limitations

1. Available Annual Cut for this Period, F.Y. 1965 Through F.Y. 1971

Table 8

Item	CUTTING METHOD						
			Regeneration				
	Intermediate	Salvage	Group, Patch, Strip, Stand	Shelterwood or Seed Tree: Preparatory & Seed 1/	Shelterwood or Seed Tree: Removal 2/	Selection	Total
Regulated area to examine (acres)	-	-	-	-	-	-	6,103
Average No. of Compartments to examine	-	-	-	-	-	-	19
Est. aver. area to Cut (acres): Not Reg.	12,206 3/	45,776 3/	-	-	-	-	57,982 3/
Area Reg.	2,519	-		265	265	-	3,049

ESTIMATED AVERAGE YIELD

SAWTIMBER - (11.0" and over d.b.h.) (Does not include utility poles)

PRESCOTT TECHNICAL WORKING GROUP

Scribner rule MMBM	0.654	-	-	0.287	0.154	-	1.095
International ¼" rule MMBM	0.752	-	-	0.330	0.177	-	1.259
MM Cubic Feet	0.168	-	-	0.074	0.039	-	0.281

WALNUT CREEK TECHNICAL WORKING GROUP

Scribner rule MMBM	0.612	-	-	0.190	0.103	-	0.905
International ¼" rule MMBM	0.704	-	-	0.219	0.118	-	1.041
MM Cubic Feet	0.141	-	-	0.044	0.023	-	0.208

ADMINISTRATIVE WORKING GROUP

Scribner rule MMBM	0.752	-	-	0.078	0.042	-	0.872
International ¼" rule MMBM	0.865	-	-	0.090	0.048	-	1.003
MM Cubic Feet	0.192	-	-	0.020	0.011	-	0.223

Summary: Scribner rule MMBM - 2.872
International ¼" rule MMBM - 3.303
MM Cubic Feet - 0.712

Table 8 - continued

Item	CUTTING METHOD						
			Regeneration				
	Inter-mediate	Salvage	Group, Patch, Strip, Stand	Shelterwood or Seed Tree		Selec-tion	Total
				Prepar-atory & Seed 1/	Removal 2/		
ESTIMATED AVERAGE YIELD							
OTHER PRODUCTS							
-UTILITY POLES - (8.0" through 18.9" d.b.h.)							
Scribner rule MMBM	0.127	-	-	0.085	-	-	0.212
International ¼" rule MMBM	0.145	-	-	0.098	-	-	0.243
MM Cubic Feet	0.046	-	-	0.031	-	-	0.077
MM Linear Feet	0.076	-	-	0.052	-	-	0.128
M No. of Pieces	2.986	-	-	2.014	-	-	5.000
M Cords	0.545	-	-	0.368	-	-	0.913
-PULPWOOD - (5.0" through 10.9" d.b.h.)							
MM Cubic Feet	1.388	-	-	-	-	-	1.388
M Cords	16.332	-	-	-	-	-	16.332
-POLES- (Mostly 4-11 ft. lengths) (House Logs)							
MM Cubic Feet	0.008	-	-	-	-	-	0.008
M Cords	0.094	-	-	-	-	-	0.094
-CORDWOOD - (All Species) (Fuelwood)							
MM Cubic Feet	0.076	-	-	-	-	-	0.076
M Cords	0.894	-	-	-	-	-	0.894
-POSTS- (7-8 Ft. Lengths)							
MM Cubic Feet	0.002	-	-	-	-	-	0.002
M Cords	0.024	-	-	-	-	-	0.024

Summary: Scribner rule MMBM - 0.212
International ¼" rule MMBM - 0.243
MM Cubic Feet - 1.551
M Cords -18.257

Table 8 - continued

Item	CUTTING METHOD						Total
	Intermediate	Salvage	Regeneration				
			Group, Patch, Strip, Stand	Shelterwood or Seed Tree		Selection	
				Preparatory & Seed 1/	Removal 2/		
ESTIMATED AVERAGE YIELD							
UNREGULATED ADDITIONAL CUT OBJECTIVE							
-SAWTIMBER- (11.0" and over d.b.h.)							
Scribner rule MMBM	-	1.025	-	-	-	-	1.025
International ¼" rule MMBM	-	1.179	-	-	-	-	1.179
MM Cubic Feet	-	0.263	-	-	-	-	0.263
M Cords	-	3.094	-	-	-	-	3.094
NONCONVERTIBLE PRODUCTS							
-CHRISTMAS TREES- (Mostly Pinon)							
No. of trees	1,650	-	-	-	-	-	1,650
-GREENERY- (All Species)							
No. of tons	20	-	-	-	-	-	20
-WILDLINGS- (All Species)							
No. of trees	150	-	-	-	-	-	150

1/ Includes Partial
2/ Includes Release
3/ Area is not included in area regulation
4/ This unregulated material is available only if recovered from areas on the Working Circle which are not currently included within a going timber sale. This is material that will be harvested from trees that have recently died and are still sound or from trees that have been successfully attacked by a killing agent. It is planned that this material be recovered by small woods operators who have simple, mobile equipment that can move easily from one place to another. The logs recovered would probably be resold to the major sawmill operators in the area. This unregulated allowable cut is not interchangeable with the "live" tree allowable cut. This allowable cut may be recovered from any of the three working groups; Prescott Technical Working Group, Walnut Creek Technical Working Group, and Administrative Working Group. This includes roadside zones. This material may be salvaged from the 45,776 unregulated acreage annually.

Table 8-a

Sawtimber Annual Allowable Cut 1/

Types of Cut	Acres	Average No. of Compartments	Net M Bd. Ft. Scribner	Net M Bd. Ft. International 2/ ¼" Rule	Net M Cu. Ft.
Prescott Technical Working Group					
Regeneration	340	1	441	507	113
Intermediate	1,362	5	654	752	168
Total	1,702	6	1,095	1,259	281
Walnut Creek Technical Working Group					
Regeneration	137	1	293	337	67
Intermediate	686	4	612	704	141
Total	823	5	905	1,041	208
Administrative Working Group 3/					
Regeneration	53	included	120	138	31
Intermediate	471	above	752	865	192
Total	524		872	1,003	223
Working Circle					
Regeneration	530	2	854	982	211
Intermediate	2,519	9	2,018	2,321	501
Total	3,049	11	2,872	3,303	712

1/ Does not include utility pole allowable cut. Allowable cut included in Table 8.

2/ Converting factor of 1.15 used to derive International ¼" Rule Bd. Ft.

3/ See breakdown by Prescott and Walnut Creek Units in Appendix.

Table 9

Utility Pole Annual Allowable Cut 1/

Working Group	2/ Total Acres	Net Pieces	Net Linear Feet	Net Bd. Ft. Scribner	Net Bd. Ft. International ¼"	Net Cu. Ft.
Prescott	29,374	5,000	128,354	211,612	243,354	77,563

1/ Integrated with Sawtimber Operation in Prescott Technical Working Group. Allowable cut included in Table 8.

2/ Acres to enter each year the same as Prescott Technical Working Group.

Table 10

Potential 5-Year Pulpwood Cut 1/

Working Group	Pulpwood Operable Acres	Annual Cut M Cu. Ft.	Annual Cut Cords
Prescott	30,488	988	11,391
Walnut Creek	16,472	154	1,810
Administrative	10,506	266	3,131
Total	57,466	1,388	16,332
Total 5-Year Allowable Cut		6,940	81,660

1/ Allowable cut included in Table 8.

2. Cutting Limitations

This plan recognizes that cyclic market conditions will cause fluctuations in the annual cut of timber. Therefore, the goal to strive for is to balance the allowable cut over a 7-year period. 1/ Overcutting in any one working group may not exceed 10 percent of the annual allowable cut. Undercuts may be made up any time during the plan period. Allowable cuts are not interchangeable between the working groups.

The Prescott Working Circle consists of 185 partially-timbered compartments. Approximately 45 compartments, with an average of 900 acres each, will be examined annually until all compartments have been examined.

F. Plan Revision

This plan will be revised prior to June 30, 1971. Revisions, additions, or amendments before this date will be made as necessary because of changes or advances in utilization of products, the occurrence of extensive burns, insect epidemic, or other conditions which the Forest Supervisor shall deem necessary to make this plan inoperable.

If needed, the Action Plan - Sections VI, VII, VIII, and maps will be revised annually by March 1, by the Forest Supervisor and will be submitted to the Regional Forester for approval. Changes in the cutting budget, the transportation planning, and the schedule of compartment examination and entry may be made at this time.

G. Coordination With Other Uses

The individual District Multiple Use Plans will provide guidelines for coordinating timber production with other uses. Any conflicts between this plan and Multiple Use Plans or other regionally approved resource plan must be resolved by the Regional Forester.

This Management Plan will determine the management decisions and set up the silvicultural practices to be used to produce the desired timber stands for all working groups within the Working Circle. It also provides guidelines for management of special areas such as the Prescott Municipal Watershed and proposed recreation sites. 2/

The specifics of the Land Management Program will be determined for each particular unit of the Forest through compartment examination.

1/ In the planned Region Three 10-year reinventory and management planning program, this working circle is scheduled in F.Y. 1971 for reinventory and for a revised plan to be completed by June 30, 1971.

2/ Most of the commercial forest land in the working circle lies within the Salt-Verde Watershed. Timber harvest programs within this watershed will be coordinated with water yield improvement programs. These programs will not reduce the annual allowable cut.

III. INTRODUCTION

A. Description of Working Circle

The Prescott Working Circle is located in the central part of Arizona. It is accessible from the south by U. S. Highways 69 and 89, and from the north by U. S. Highways 89 and 89-A. The Forest road system consists primarily of inherited ranch and mining roads which are of a low standard.

A strip of nonforested State, B.L.M., and private land divides the working circle into eastern and western units. The City of Prescott, which has a population of 13,000 people and an area population of 18,000, lies between these two units. The western portion contains the Prescott municipal watershed of approximately 17,000 acres.

This watershed, as well as the balance of the working circle, is characterized by rough topography ranging in elevation from 5,300 feet on Lynx Creek to nearly 8,000 feet on Mt. Union. There are a few moderately level basins along the major drainages, but steep slopes are predominant throughout the area. Most of the drainage is into the Hassayampa, Agua Fria, and Verde Rivers. All these subdrainages eventually reach the Gila and then the Colorado River.

Bradshaw granite and Yavapai schists are the parent materials for the majority of the soils in this area. The soils vary from shallow layers on steep slopes to relative deep layers in the draws and outwashes. The "A" horizon consists primarily of sandy loam.* Large granite ledge outcrops and granite boulders persist throughout the working circle. There are some areas with limestone formations and one notable malpais formation on Big Bug Mesa. The granitic soils have a high initial moisture absorption capacity, but are erosive. This is especially true of the soil if it has been disturbed. This creates problems in logging and road construction programs.

The mean annual precipitation is 19.5 inches at the lower edge of the timber zone (1889 to 1957). Crown King, in the Bradshaw Mountains, has an average annual precipitation of 25.16 inches (1928 to 1958). The precipitation occurs during the July-August rainy season and during the winter months in the form of snow. Prolonged periods of drought and below normal precipitation are common. The temperature extremes are from 0° to 100° F. The prevailing winds are from the southwest.

Hunter visits during 1962 totaled nearly 8,000 of which 6,000 were big game hunters. Mule deer, antelope, turkey, and bear are the most common big game. Small game consists of rabbits and Abert squirrels. Game birds are mourning doves, Gambel quail, and bandtail pigeons.

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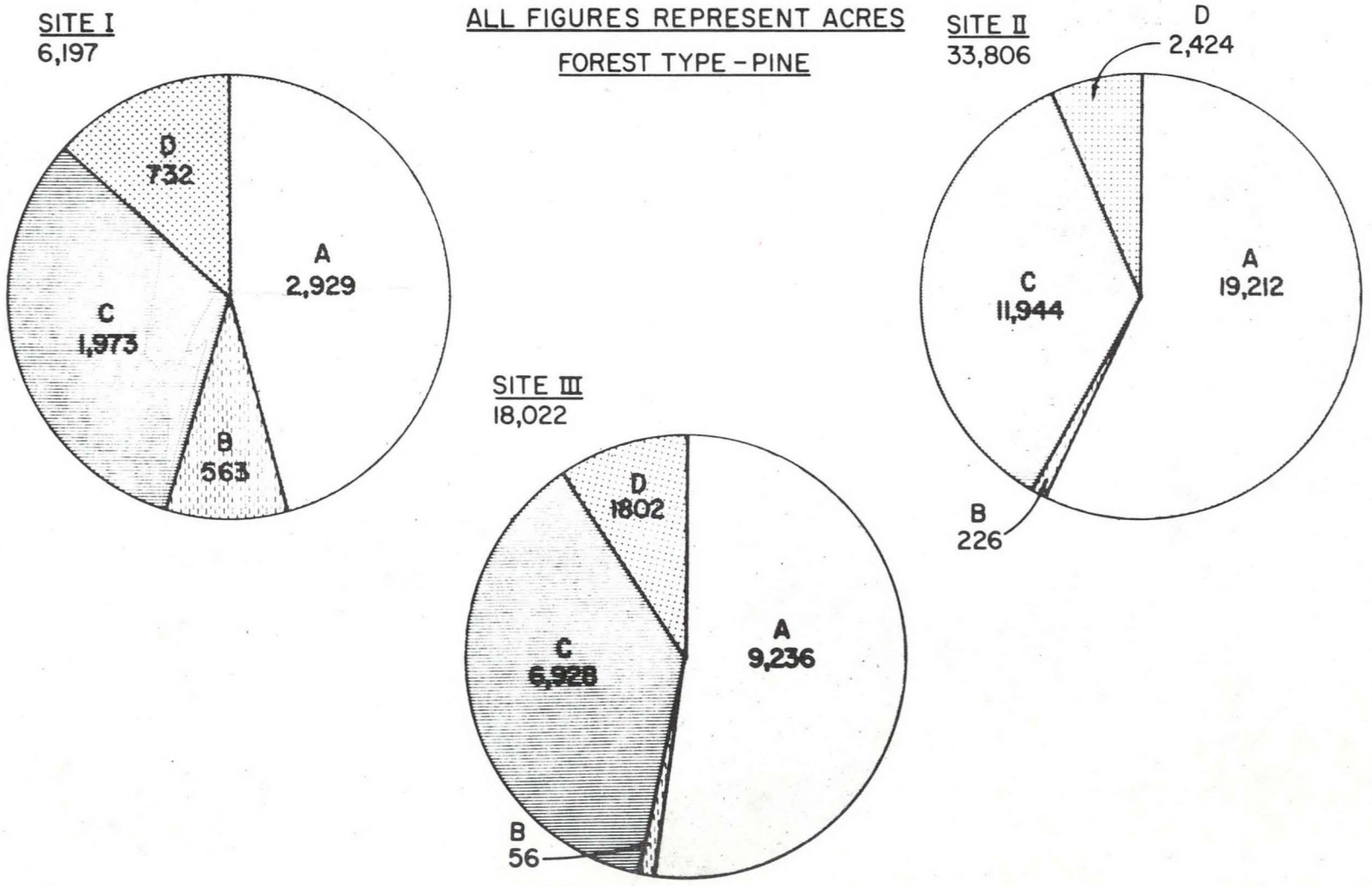
*Graph #1 - Soil

SOIL TYPE

A. Sand
B. Clay
C. Loam
D. Gravel

ALL FIGURES REPRESENT ACRES

FOREST TYPE - PINE



PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

A hunting season is established for all game species except bandtail pigeons which are low in number.

The overall recreation use on this Forest is heavy and is increasing rapidly. There were over one-half million recreation visits in 1963 and one million visits are expected in 1976.

B. Description of Timber

1. Ponderosa Pine Forest Type

This type covers 98% of the commercial forest areas of the working circle. The forest type lies at 5,000 to 7,000 feet in elevation, depending on slope and exposure. In general, slope and exposure determine the stand productivity throughout most of the timber zone. North-facing, gentle slopes produce productive stands and south-facing, steep slopes produce marginal stands that merge with brush and piñon-juniper at relatively high elevations.*

The pine stands contain heavy dwarfmistletoe infection. This parasite is causing a large reduction in the growth rate.

Spot infestations of Ips beetles are evident in recent cutover areas. However, epidemic proportions have never been reached.

Red rot is found in trees throughout the older age classes. There are small pockets of large poletimber and yellow pine that contain as much as 80% infection. (See Insect and Disease Control, Section IX).

a. Prescott Area

The Prescott area consists of 40 to 80 year old stands that originated following cutting during the 1870-1890 period.** A scattered overstory of residual yellow pine top these young pole stands. About 30% of the timber sites may be classified as marginal. This is true of a high percentage of the timber sites on the Verde and Chino Valley Ranger Districts. Inoperable areas and woodland-timber transition zones contain the balance of the poor sites.

The better pole stands are found in drainages and on alluvium fills where moisture is abundant. Overstocking generally occurs in these areas. On other sites, understocking is common. Establishment and growth of seedlings is hampered by brush and other woody vegetation. Oak and juniper are competing with saplings and young poletimber, thus reducing growth and producing poor-form trees.

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*See Graphs #2 and #3 for slope and exposure -(Aspect)

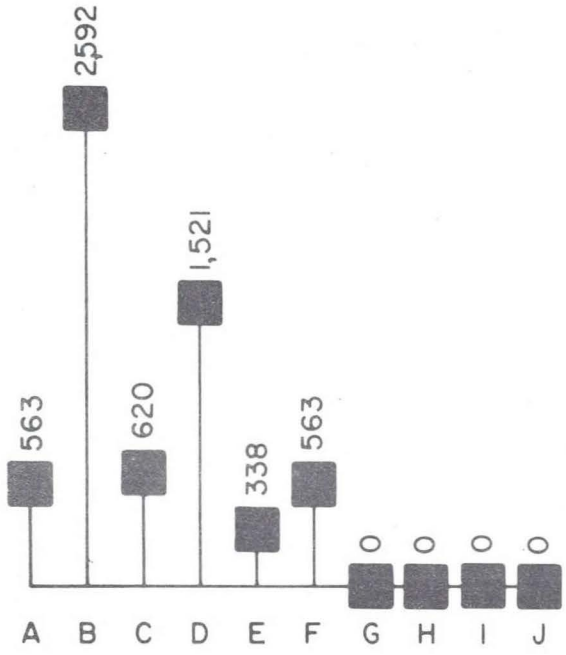
**Graph #4 - Age Class Distribution

PERCENT OF SLOPE

A. 0%	F. 50%
B. 10%	G. 60%
C. 20%	H. 70%
D. 30%	I. 80%
E. 40%	J. 90%

ALL FIGURES REPRESENT ACRES

FOREST TYPE-PINE



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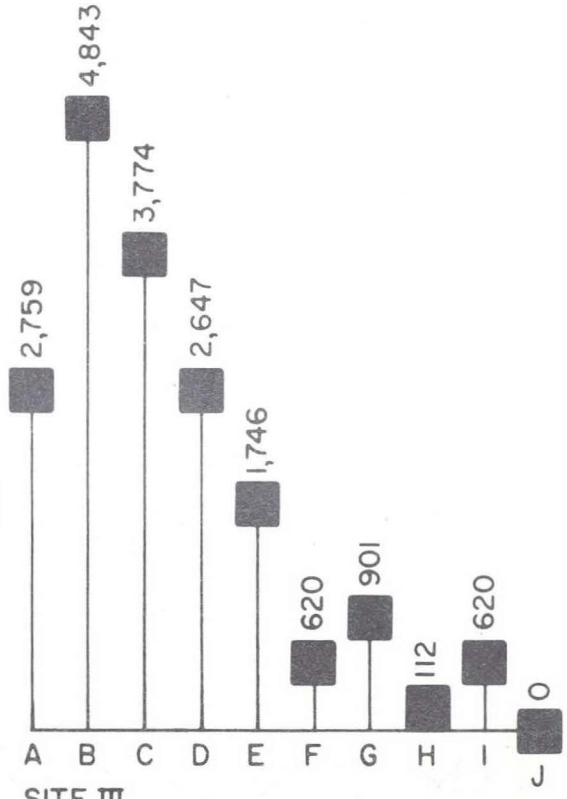

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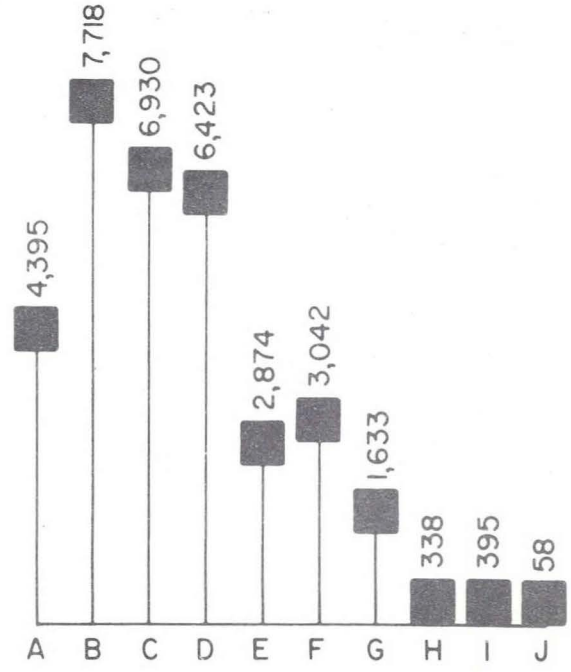


SITE II
33,806

PRESCOTT FOREST WORKING CIRCLE

PRESCOTT NATIONAL FOREST

6/64 (C.D.B.)

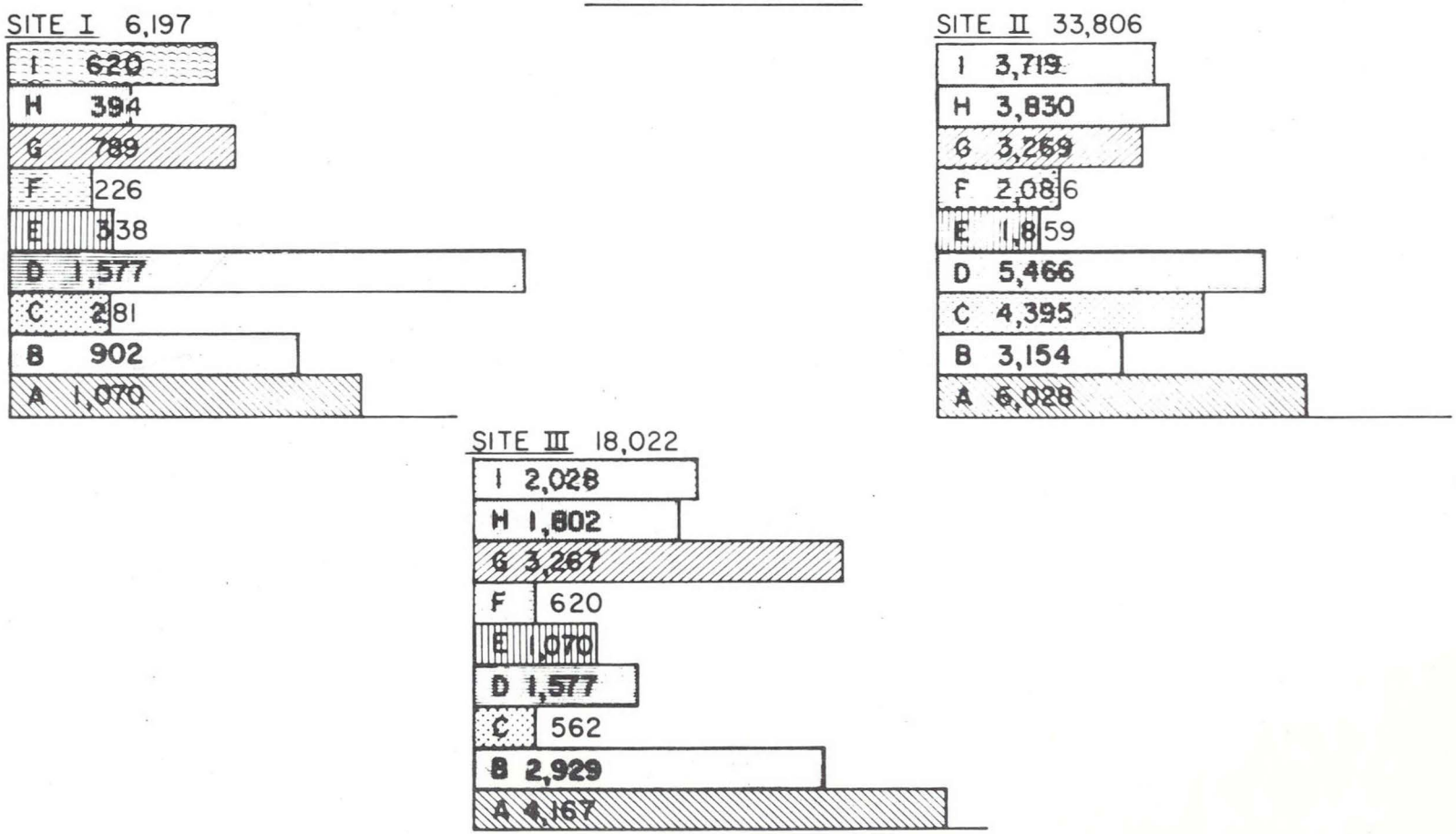
GRAPH 2

ASPECT

A. North
B. Northeast
C. East
D. Southeast
E. South
E. Southwest
G. West
H. Northwest
I. Flatland or ridgetop

ALL FIGURES REPRESENT ACRES

FOREST TYPE-PINE



PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

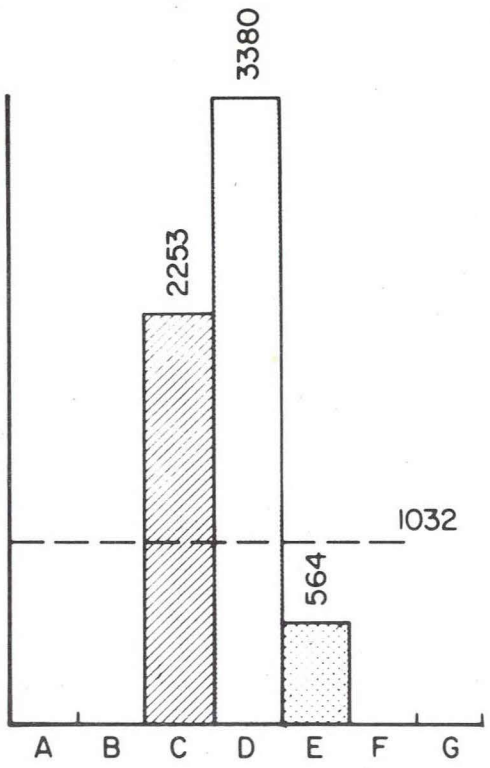
AGE CLASS DISTRIBUTION

Age Class - Years

A	1-20	E	81-100
B	21-40	F	101-120
C	41-60	G	121+
D	61-80		

– – – – Desired acres per age class

ALL FIGURES REPRESENT ACRES
FOREST TYPE—PINE



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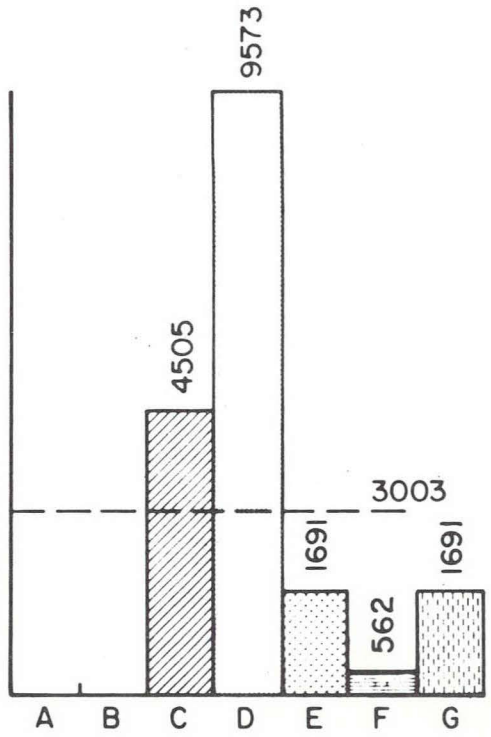

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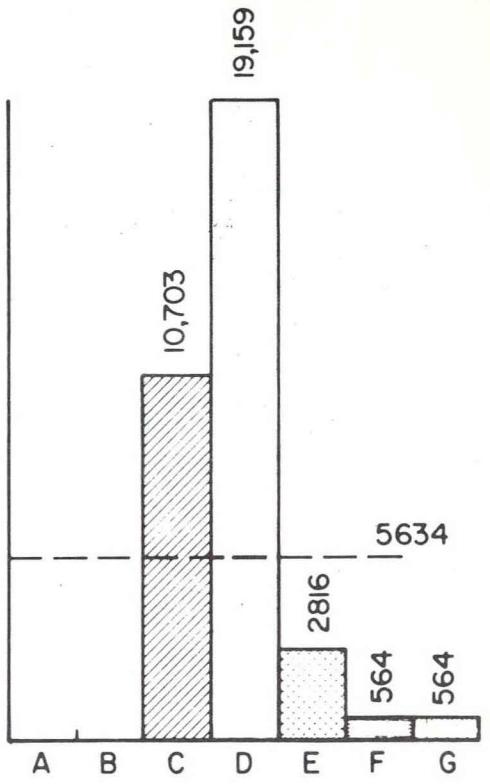

SITE II
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PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

b. Walnut Creek Area

The Walnut Creek Area consists of recent cutover timber and 3,000 acres of accessible virgin timber. The stands are understocked, especially in the 1 to 40 year age class.* Establishment of reproduction is hampered primarily by Alligator juniper. Getting the right combination of a good seed crop and moisture at the desirable time for early seed germination also seems to present a major problem for natural seeding.

The timber sites are located in drainages which indicates that moisture is a critical factor for timber production in this area. The remaining virgin stands are located on basalt-capped mesas where 200-year old, one- and two-log trees are common.

c. Crown King Area

The Crown King Area is part of the Prescott management area, but is presently classified as inoperable. A good access road is needed before the existing timber stands can be economically managed.

This area was cutover during the early mining period and as the result, 60 to 80 year old trees are dominant throughout the area. Scattered, isolated stands of virgin timber can be found but not in sufficient quantity to merit special management. At present, stocking is adequate for the area.

Natural regeneration does not seem to be a problem. However, brush invasion of the timber sites may present a major problem following heavy cuts. A good seed crop should be predicted prior to cutting or provisions made to artificially regenerate the area within five years after cutting. Clear-cutting in the past and large fires have converted many timber sites into brush fields.

2. Mixed-Conifer Forest Type

The mixed-conifer forest type occurs at high elevations on the Prescott, Granite, and Crown King Ranger Districts. It covers only 2% of the commercial timber area. Therefore, it is not practical to manage this type separately from the Ponderosa pine type.

Douglas-fir, white fir, and ponderosa pine make up the type. White fir is predominant at the higher elevations of the type whereas ponderosa pine is predominant at the lower elevations. The easily accessible stands are understocked and the isolated, inoperable stands are generally overstocked. Most age classes are present in accessible stands, but younger age classes are absent in inoperable stands. Current reproduction is evident throughout the type. It is primarily white fir with lesser amounts of Douglas-fir.

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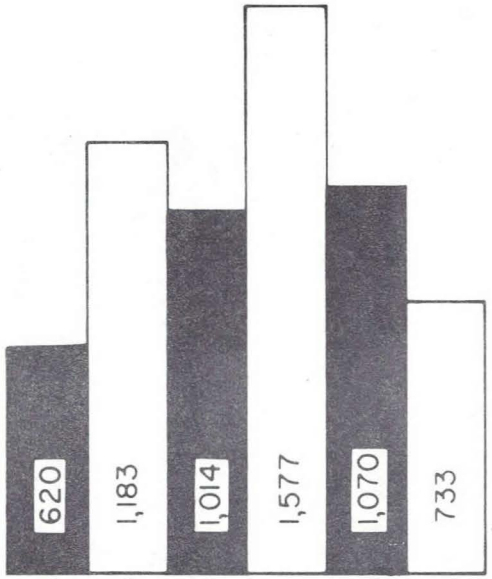
*See Graph #5 for percent of stocking

BASAL AREA EXPRESSED AS A PERCENT OF OPTIMUM BASAL AREA STOCKING

A. 1— 20%
B. 21— 50%
C. 51— 90%
D. 91—130% (Optimum Range)
E. 131—170%
F. 171+

ALL FIGURES REPRESENT ACRES

FOREST TYPE—PINE



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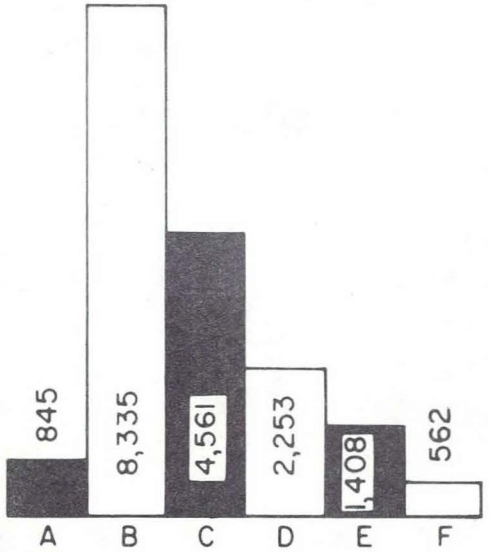

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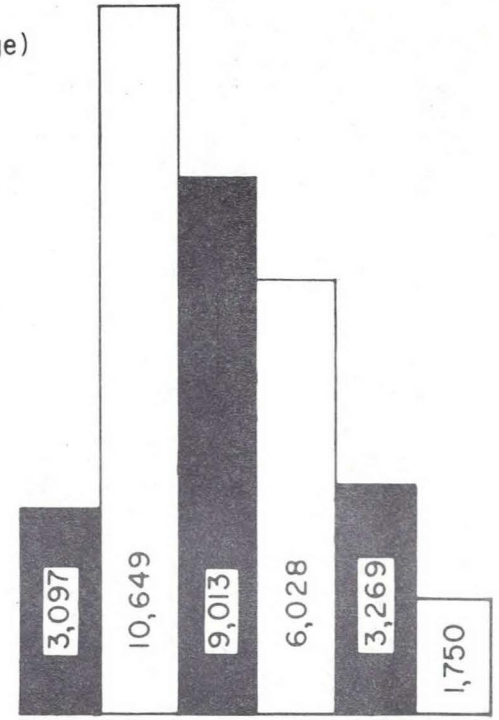

SITE II
33,806

PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

6/64 (C.D.B.)

GRAPH 5

Disease and insect control measures have not been taken in this type since the establishment of the working circle. Endemic populations have been maintained through natural controls.

Little attention has been given to the management of the mixed-conifer type in the past. This has resulted in decadent, unhealthy stands, especially in the white fir type.

3. Aspen

Small stands of aspen exist near the upper elevational limits of the ponderosa pine type. They are not in sufficient quantity to be of commercial value.

C. History of the Working Circle

Settlement within the working circle began with the discovery of gold at Lynx Creek in 1863. The usual rush of people followed the strike and in 1864, Prescott was made the Territorial Capital of Arizona. It was during this period that grazing of livestock began at lower elevations. Overstocking was prevalent from the beginning, producing extreme deterioration of the range by 1900.

The demand on the timber resource was phenomenal during this period. Vast areas throughout the Forest were clear-cut to provide timbers and fuel to operate mines. The domestic consumption of the settlers alone was perhaps equal to or greater than our present allowable cut. The timber stands on the Walnut Creek District escaped heavy cutting because they are located outside the mineral belt.

May 10, 1898, the western division of the working circle was set aside by Presidential Proclamation as the Prescott Forest Reserve. The eastern division was created December 30, 1907, as the Verde Forest Reserve. The two divisions were consolidated on July 2, 1908, and called the Prescott National Forest. An exchange of acreage between National Forests took place October 22, 1934. The Prescott transferred Bloody Basin (151,285 acres) to Tonto National Forest and received 249,201 acres from the Tusayan National Forest. This established the present net of 1,247,572 acres.

With the establishment of the Forest Reserve, livestock grazing created the first problems. The first grazing permit was issued in 1902. At this time, large ranches began to disappear due to a combination of factors, such as deterioration of the range as the result of overuse, drought, and increase in population.

The railroad entered the working circle about the turn of the century. Its primary purpose was to aid in transporting ore from the mines. In 1930, the tracks were removed from the Crown King area. The old railroad grade provided the southern extremity of the working circle with a low standard access road which is still in use. Recently, the

main railroad line was diverted around Prescott, which is now connected by a spur line.

In 1919, a two-page Timber Management Policy Statement was prepared. This was the first recorded attempt to manage timber in this area. The stated objectives were:

(1) Production of mining timbers,

(2) Production of firewood,

(3) Watershed protection.

No limitations were placed on the cutting of sawtimber because, as the Statement reads, "There have been no commercial sawtimber sales for several years. None are anticipated in the near future. There is practically no sawtimber to sell." This statement reflects the heavy cutting that was done prior to the establishment of the Forest.

Management Plans were prepared in 1926 for the Prescott, Jerome (present-day Verde and Chino Valley Ranger Districts), and Walnut Creek Working Circles. A 13,200 Mbf allowable cut for the following decade was established. A total of 2,470 Mbf was actually harvested. A high percentage of this came from the Walnut Creek Block. The primary demand on the Forest during this period was for cordwood. Approximately 26,000 cords were cut during the 10-year period.

Complications resulting from large numbers of unperfected mining claims were pointed out in the 1926 Plan and later in the 1931 Policy Statement. Much the same situation and difficulties exist today. The 1955 mining law (PL 167, 84th Congress) will provide some relief. See Mining Conflicts in Section IV.

The 1931 Policy Statement followed the same line of reasoning as the 1926 Management Plan. It appeared doubtful to the Foresters preparing the plan that the available sawtimber could be sold at that time. This contention was substantiated in the years to follow. The actual harvest from 1932 until 1954 was 10,396 Mbf. Of the total, 76% came from the Walnut Creek Block.

The 1954 Management Plan recognized some 62,000 acres of commercial forest land with an estimated operable volume of 130 MMbf, largely ponderosa pine. The allowable cut for the following decade was fixed at 40 MMbf of sawtimber and 250,000 utility poles. The Prescott Block's objectives were to produce Class 6 or better (ASA Standards) utility poles and small sawlogs. The Walnut Creek Block was maintained as a sawlog producing unit because of its high percentage of virgin sawtimber. The allowable cuts were separate and not interchangeable between the two blocks.

During the past nine years, 20,000 acres (one-third of the working circle's operable forest lands) have been cutover to produce 20 MMbf of sawtimber. The Prescott Block produced 43,000 utility poles from 10,000 acres. If the full allowable annual cut of 5 MMbf had been made, the working circle would have been cutover during a 14-year period. An average annual cut of 2.3 MMbf and 4,800 poles has been maintained over the past nine years.

The working circle has four wood-using industries. They are two sawmills, one pole-treating plant, and the Air-Lock Log Company that converts small poletimber into house logs. None of these industries are located on Forest lands. They are capable of utilizing the maximum annual cut this working circle can provide, with the exception of small poles from thinnings.

D. Past Accomplishments

1. Land Status Changes

There have been no major changes in land ownership since the 1954 Working Circle Plan was written. Approximately 200 acres within the timber zone have been patented since 1954 under the Mining Law of 1872.

Land changes in the past decade have been numerous. Withdrawals from mineral entry for recreation purposes have constituted the major number. 3,400 acres of existing and potential timber sites were classified as recreation and administrative sites by Public Land Order in 1957. Roadside zones, trailside zones, and potential recreation areas and their buffer zones make up the balance of the present administrative working group.

Some 42,000 acres of nontimbered land is presently classified as available to pass into private ownership through land exchange procedures. This land is primarily valuable for livestock grazing and, in some cases, for subdivision.

2. Volume and Area Cutover

Table 11

Volumes and Area Cutover - F.Y. 1955 through 1963

Year	Sawtimber		Utility Poles				Total
	Acres	M Bd. Ft.	Acres	No. Pieces	M L. Ft.	M Bd. Ft.	M Bd. Ft.
1955	1,146	1,205	1,750	3,921	69	126	1,331
1956	1,630	2,016	410	5,985	116	211	2,227
1957	1,630	1,838	500	9,156	123	249	2,087
1958	1,231	1,390	750	5,087	88	167	1,557
1959	2,560	2,825	480	2,008	101	166	2,991
1960	3,040	2,364	160	1,559	22	40	2,404
1961	3,000	3,241	2,250	5,984	179	316	3,557
1962	2,848	2,303	2,232	5,336	149	237	2,540
1963	2,670	3,317	1,381	4,227	113	142	3,459
Total	19,755	20,499	9,913	43,263	960	1,654	22,153
Avrg.	2,195	2,277	1,101	4,807	106	183	2,460

Allowable Cut:	Annual	9 Year
Sawtimber	4 MM Bd. Ft.	36 MM Bd. Ft.
Poles	25 M Pcs.	225 M Pcs.

3. Timber Stand Improvements

Little noncommercial thinning has been done on this working circle in addition to the thinning resulting from logging practices. Some 123,064 stems of pine and undesirable species have been destroyed to date on 359 acres.

A large number of trees were pruned by the Civilian Conservation Corps in the late '30s, but no records are available. Records of more recent work show that as of January 1, 1963, 7,261 trees have been pruned on 624 acres.

4. Planting and Seeding

In 1940, a small ponderosa pine plantation of approximately 20 acres was established in the Granite Basin Recreation Area. Little information is available concerning the seedlings used or the method of planting. However, from observations, it appears there was almost 100% survival. The plantation now needs pruning and thinning.

Two other experimental plantings have been tried on the working circle. Tara plants (Caesalpina Spinosa) were planted for erosion control in 1944. They were planted in four areas and little survival was noted at the end of the first year.

An experimental planting of Cork oak was undertaken and financed by Western Crown Cork and Seal Company in 1945. This planting also proved unsuccessful. By 1949, there were only ten survivors out of 309 plants on one of three plots and no survivors on the other two. A recent check has shown that there are no survivors now.

An attempt was made to collect ponderosa pine seed in 1960. A good seed crop was predicted and the collection was to be made in a timber sale area. The program was abandoned after 2½ days of unsuccessful collecting.

5. Pest and Disease Control

Dwarfmistletoe infection in many stands has been reduced through cutting practices. Heavier cuts were made in infected stands in an attempt to reduce the spread of the parasite. The current inventory indicates that dwarfmistletoe still presents a major problem.

It is planned to locate all areas containing dwarfmistletoe infections during compartment examination. As each compartment is entered, each stand will be treated by specific prescriptions using the marking guides in FSH 2442.8 R-3 Supplement TD No. 16.

There have been periodic Ips lecontei outbreaks on the working circle. Continual awareness of this threat is necessary. All efforts should be centered on the reduction of slash larger than 3" in diameter.

6. Fire Control

Fire protection has been improved by the establishment of an air tanker base at the Prescott airport in 1958. The use of this additional tool for initial attack purposes may well reduce the acreage loss in the working circle.

Since 1954, there have been 821 fires. These have burned 35,919 acres and denuded an estimated 3,000 acres of commercial timber land. The major portion of acres burned can be attributed to three Class E fires that occurred in 1955 and 1956. Statistics of the fires are as follows:

	Johnson	Sparks	Mingus
Year	1955	1955	1956
Acres Burned	18,610	540	14,640
Timber Acres Burned	3,000	490	4,946
Mbf Timber Destroyed	6,028	800	7,255
Cause	Man	Man	Man
Lives Lost	1	0	0

The timbered portion of the Johnson Burn is currently classified as inoperable, due to lack of access. The Sparks, Mingus, and Ruth Burns (occurred prior to 1954) contain the estimated 3,000 acres that will be reforested in the next 20 years.

7. Management

All-aged management, using the single tree selection risk marking, has been the practice on the Walnut Creek Block over the past decade. Of 13,000 acres of virgin timber that existed in 1954, only 3,000 acres remain to be cut. This will be cut during the first two years covered by this plan.

On the Prescott Block, which consists of a much younger stand, management was directed toward production of utility grade poles and small sawtimber. All-aged management was used.

IV. PROBLEMS

A. Timber Harvest

Topography in general consists of a series of rolling hills and mesa-like ridges cut by moderately deep canyons.* Rock outcrops occur throughout the working circle.** Soils are of granitic derivation and highly erosive. This combination increases the cost of harvesting the timber resource.

As logging progresses through the balance of the operable timber zone, logging costs will increase over the present rate due to steeper slopes, low volume stands, and longer hauls.

B. Timber Utilization

As cutting returns to cutover areas following virgin harvests, average sawlog sizes will get smaller. The Prescott Technical Working Group will produce 16" to 18" sawlogs in conjunction with the utility pole harvests.

The initial harvest of utility poles on highly productive sites is near completion. During the next cutting period, a substantial reduction in the annual allowable utility pole cut shown in the 1954 plan must be made.

C. Stand Improvement

About the turn of the century, a good seed crop produced overstocking in the present day 41- to 80-year age classes on the Prescott Block. A market is available for a small portion of these poles but a pulpwood or other market needs to be developed to take the other material.

D. Regeneration

1. Stocking

From observations and inventory data, it is evident that the Walnut Creek Block and marginal sites on the Prescott Block present a regeneration problem.*** In the past, the working circle has depended entirely on natural regeneration with little or no seedbed preparation. This has resulted in practically no stocking in the 1-40 year age class.

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*Graph #6 - Topography
**Graph #7 - Rock
***Graph #8 - Competing with Reproduction, and
Graph #9 - Seedlings Per Acre

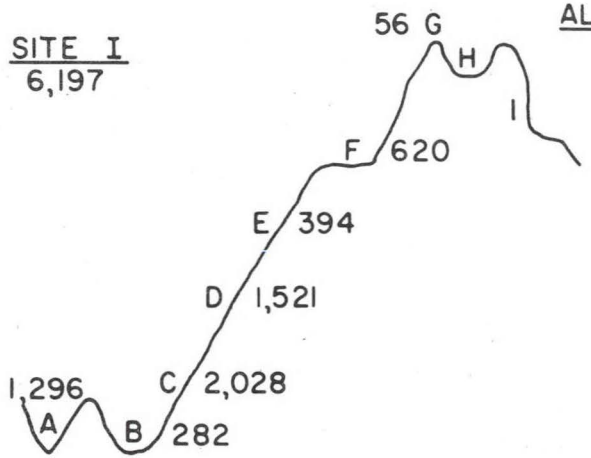
TOPOGRAPHY

A. V-shape canyon bottom
B. U-shape canyon bottom
C. Lower 1/3 of slope
D. Middle 1/3 of slope
E. Upper 1/3 of slope
F. Plateau or flatwoods
G. Ridgetop
H. Saddle
I. Other (sinkhole, cliff, etc.)

ALL FIGURES REPRESENT ACRES

FOREST TYPE–PINE

SITE I
6,197



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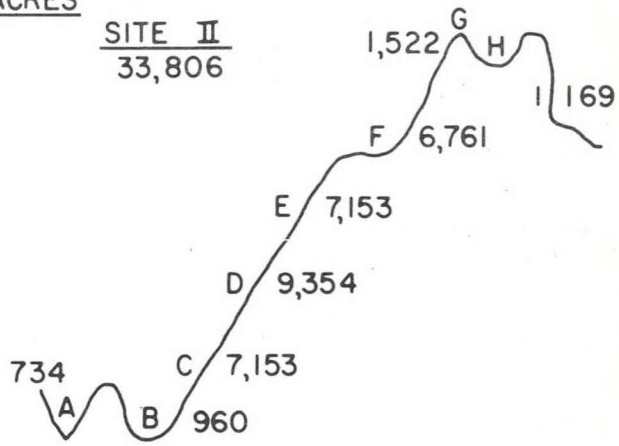

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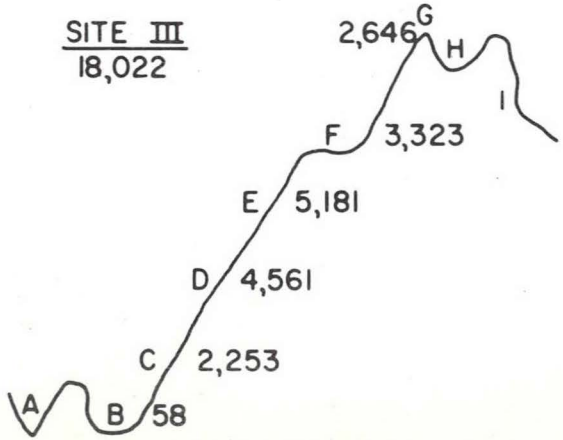


PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

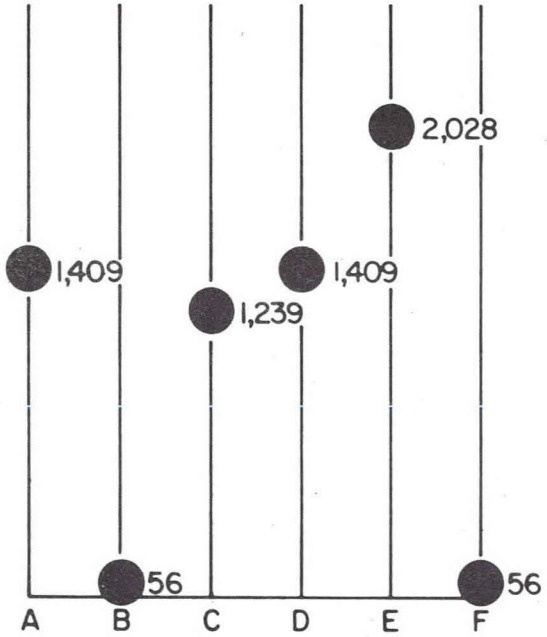
ROCK OBSTACLE TO LOGGING OR ROAD BUILDING

A. ROCK FREE
B. BED ROCK
C. 3" DIAMETER *
D. 3-10" DIAMETER *
E. 10"+DIAMETER *
F. HARD GROUND

ALL FIGURES REPRESENT ACRES

FOREST TYPE - PINE

* LOOSE ROCK — NO OBSTACLE



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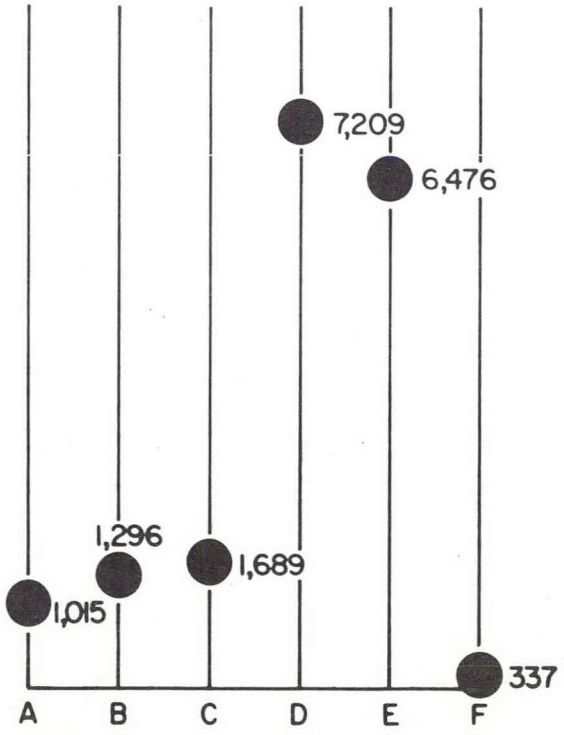

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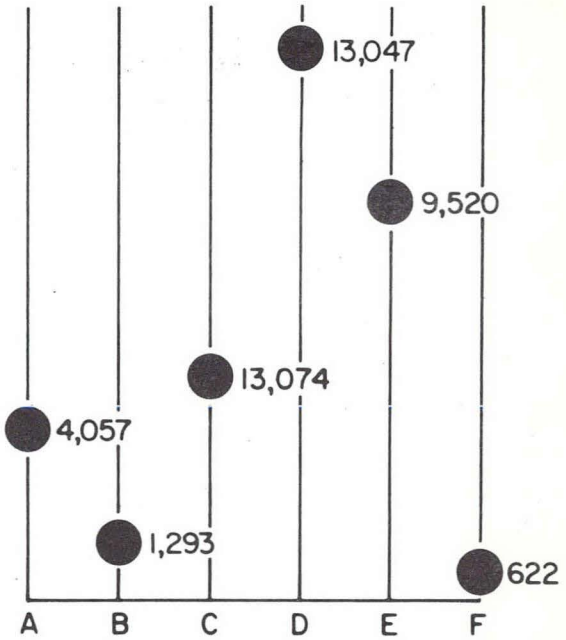

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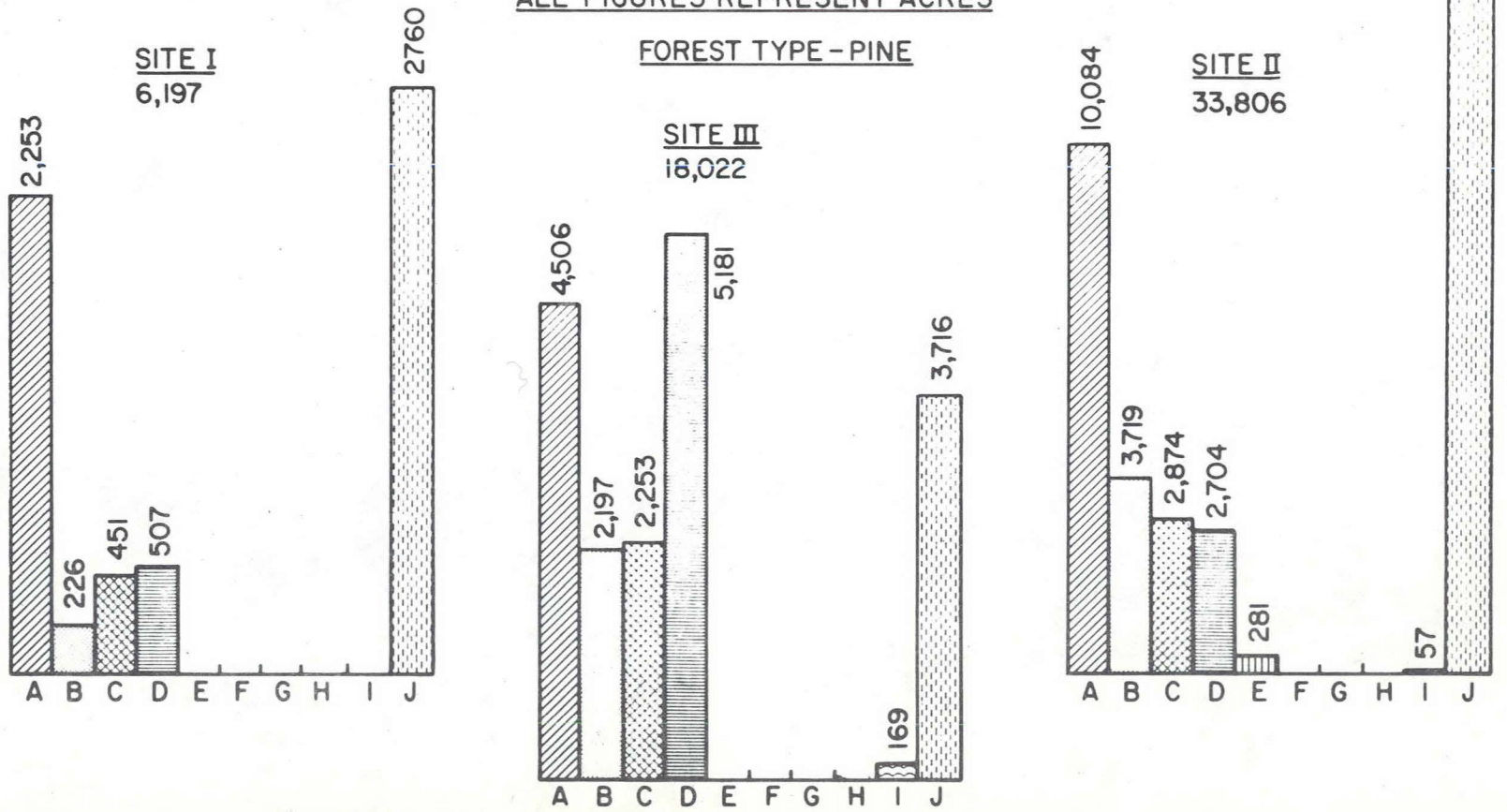
PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

FACTORS HINDERING REGENERATION

A. No obstacle to regeneration
B. Oak
C. Grass
D. Brush other than Oak
E. Rodents
F. Livestock
G. Wildlife
H. Aspen
I. Juniper or Pinon
J. Duff

ALL FIGURES REPRESENT ACRES

FOREST TYPE - PINE

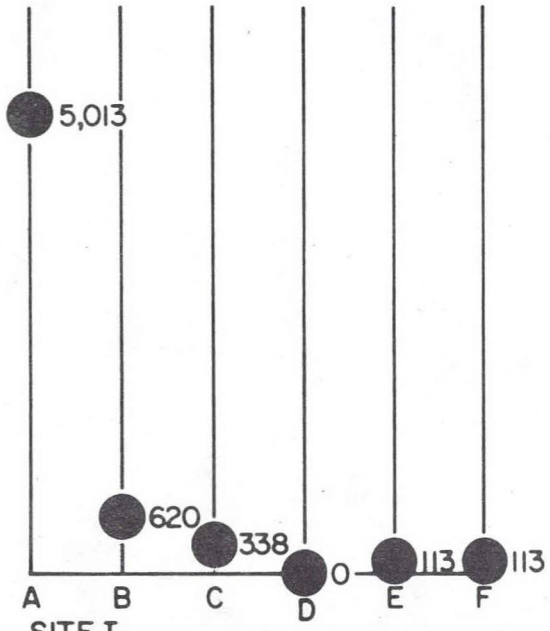


NUMBER OF COMMERCIAL SPECIES STEMS UNDER 4.5 FEET HIGH PER ACRE

A. No seedlings
B. 250 Seedlings per acre
C. 500 Seedlings per acre
D. 750 Seedlings per acre
E. 1000 Seedlings per acre
F. 1000 + Seedlings per acre

ALL FIGURES REPRESENT ACRES

FOREST TYPE-PINE



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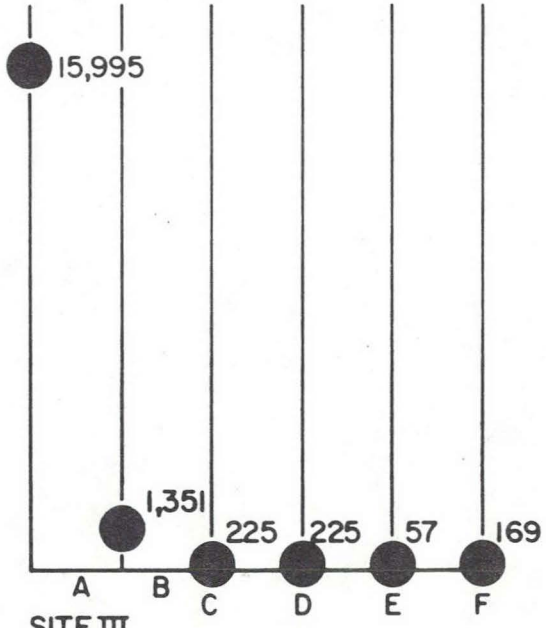

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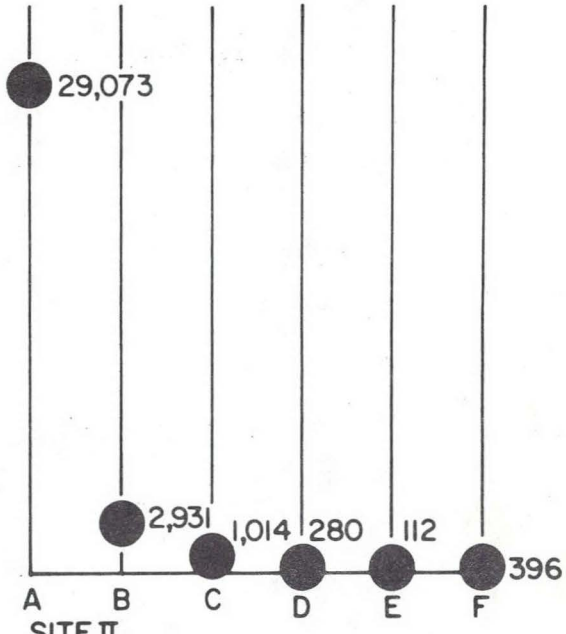

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PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

6/64 (C.D.B)

GRAPH 9

2. Competition

Brush, Alligator juniper, and oak invade and pre-empt many of the pine sites on the Prescott Working Circle.* This presents a big problem following a large fire or cutting operations. Control of weed trees must be considered an integral part of all planting, stand improvement, and cutting operations on the working circle.

3. Animals

At present, cattle use is light in the commercial timber zone. Improvement cutting and thinning could produce conditions which are favorable for growing more cattle forage, thus increasing grazing use.

Even-aged management of timber, with large regeneration areas, will tend to provide concentration areas for cattle. Fencing to protect these sites will be necessary the first few years of growth. At present, wildlife does not seem to present a problem in obtaining regeneration, except for rodents.

E. Fire

Special slash treatment is necessary along roads, recreation areas, and other rights-of-way. In limited areas over a short period, slash from noncommercial thinnings will increase the fire hazard.

Lightning is the major cause of fires on this working circle. Since this cause is not now controllable by man, the number of fires is not expected to decrease. However, improvement in fire detection and suppression methods can reduce the number of acres burned each year.

As noted from the past fire history, man-caused fires have resulted in the larger acreages burned. This is an indication that better fire prevention measures are needed.

F. Watershed

This working circle is part of the Colorado River Watershed. Soil protection and maintenance of adequate ground cover must receive consideration in the management of the timber resource.**

The City of Prescott Municipal Watershed is within the working circle. Cutting practices in this area will be designed to provide maximum watershed values without undue damage to the sites and timber production capacity.

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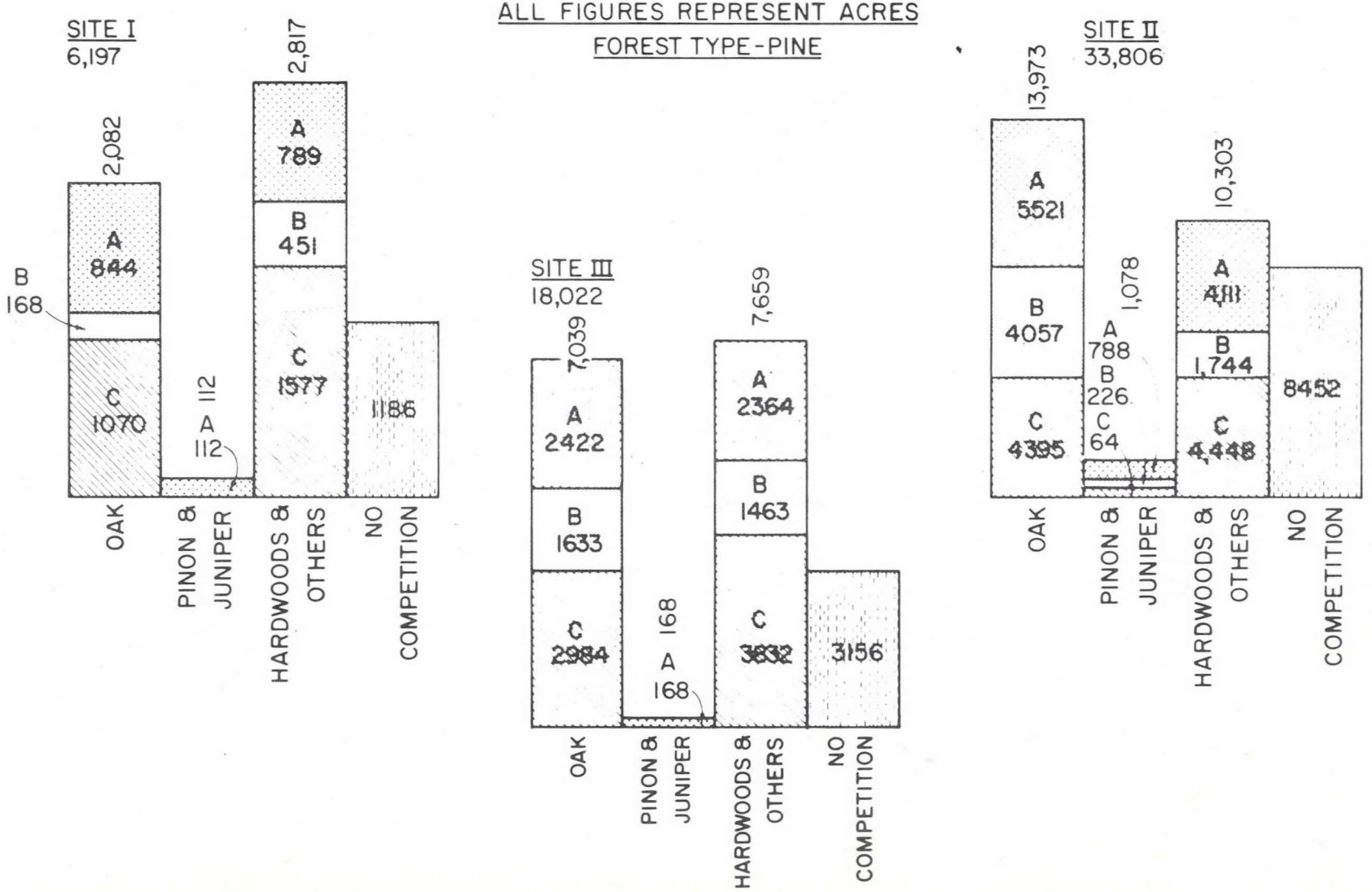
*Graph #10 - Competition Less Than 4.5' in Height, and
Graph #11 - Competition More Than 4.5' in Height
**Graph #12 - Percent of Ground Cover

NUMBER OF COMPETING SPECIES STEMS
UNDER 4.5 FEET HIGH PER ACRE

A. 500 STEMS PER ACRE
B. 1000 STEMS PER ACRE
C. 1000+STEMS PER ACRE

ALL FIGURES REPRESENT ACRES

FOREST TYPE-PINE

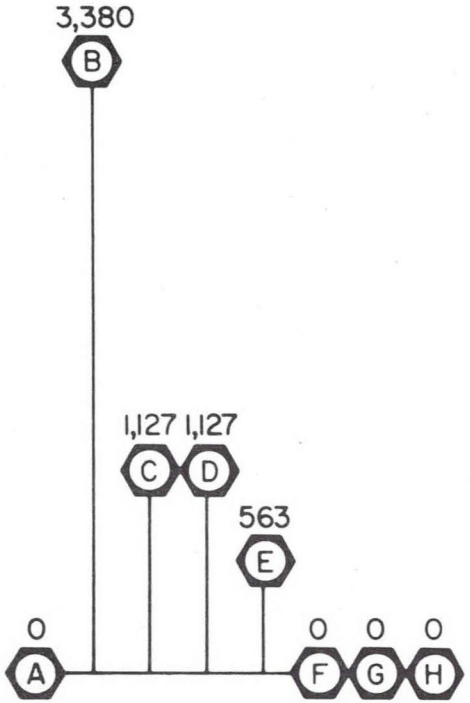


NUMBER OF STEMS OF OAK AND JUNIPER PER ACRE OVER 4.5 FEET IN HEIGHT

A. 0
B. 1-50
C. 51-150
D. 151-250
E. 251-350
F. 351-450
G. 451-550
H. 550 +

ALL FIGURES REPRESENT ACRES

FOREST TYPE - PINE



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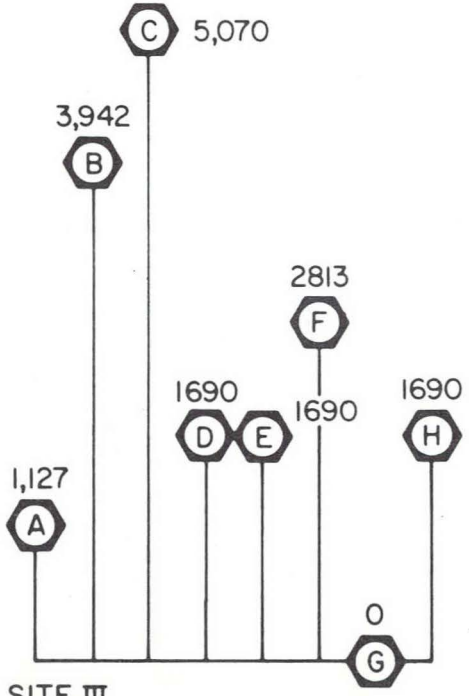

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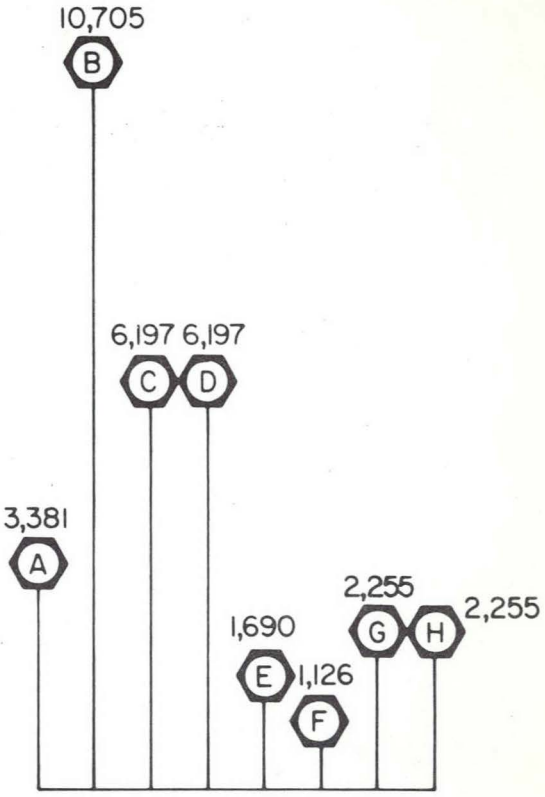

SITE II
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PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

6/64 (C.D.B.)

GRAPH II

GROUND COVER

A. 0%
B. 10%
C. 20%
D. 30%
E. 40%
F. 50%
G. 60%
H. 70%
I. 80%
J. 90%

ALL FIGURES REPRESENT ACRES

FOREST TYPE - PINE

SITE I
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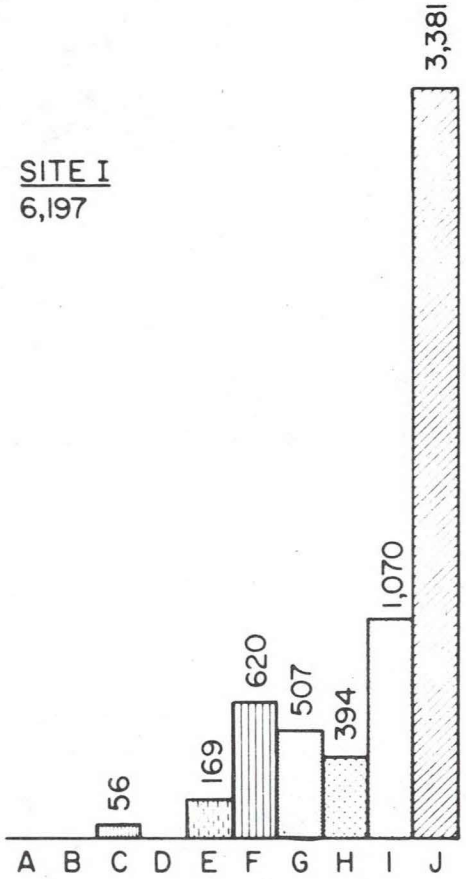

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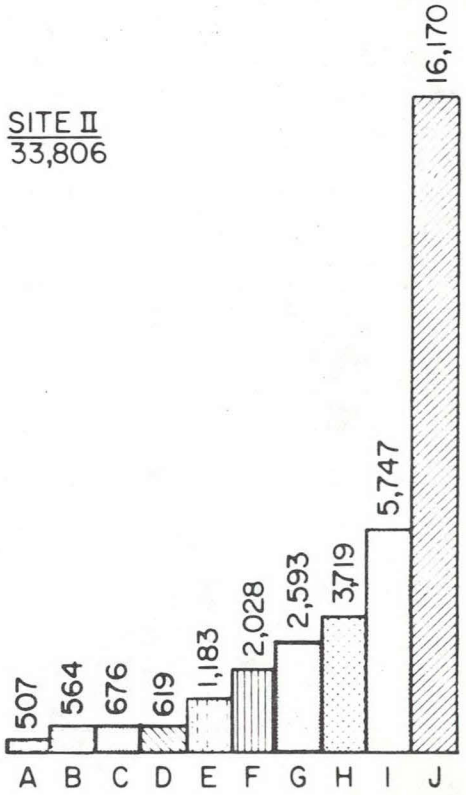

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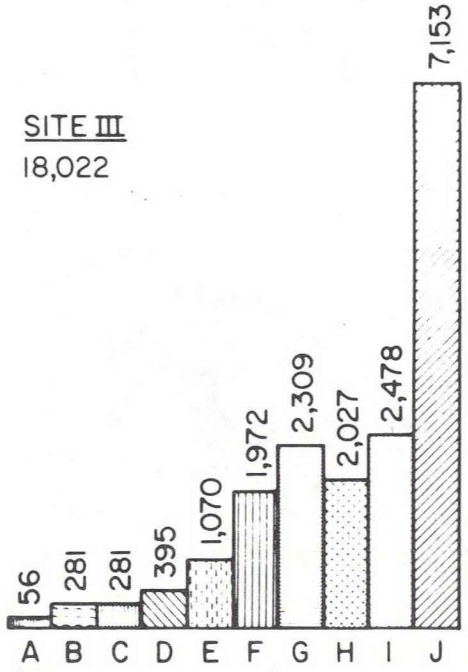

PRESCOTT FOREST WORKING CIRCLE
PRESCOTT NATIONAL FOREST

G. Recreation Use

The best timber sites are often the most desirable areas for recreation use and developments. For this reason, recreation use is making a definite impact on Prescott timber production. Some 15,000 acres are in the Administrative Working Group which consists primarily of recreation areas and their buffer zones. In most cases, basal area stocking is reduced which reduces the cut per acre. The reduced volumes and the special precautions necessary are making logging uneconomical over sizeable areas.

H. Mining Conflicts

Mining claims in some areas are interfering with sound management of the timber resource. A program is now underway to examine and contest claims believed to be invalid. This program should continue. Legitimate mining is recognized as one of the multiple uses of the National Forest and will be coordinated with timber production and other uses.

I. Disease and Insects

Dwarfmistletoe occurrence is high throughout the working circle. The current inventory indicates that 26% of the ponderosa pine type is infected. This causes an estimated 5% reduction in the annual growth rate.

Red rot incident (number of stems affected) is 19% in sawtimber and large poletimber. This percentage is expected to decrease to the point it will no longer be a problem under the intensive management program proposed in this management plan.

Ips beetles may present a problem in the future unless a better market for noncommercial and commercial thinnings is developed. If such a market is not developed, excessive cost for slash disposal may be encountered.

V. MANAGEMENT PRESCRIPTIONS

It is not deemed necessary at this time to develop a separate management system for the utility pole rotation on the Prescott Block. Based on the best available information, the management system described herein will produce the highest grades of utility poles and sawtimber that this working circle is capable of producing.

Three working groups are established. The Technical Working Groups of Prescott and Walnut Creek contain 83% of the operable timber. All of the roadside zones, trailside zones, streamside zones, recreation areas and their buffer zones, summer home areas, and administrative sites will be in the Administrative Working Group.

A. Silvicultural System

Even-aged management will be practiced. The seedtree or shelterwood reproduction method will be used. The size of the regeneration areas may range from one-fifth acre on the Administrative Working Group to 500 acres on the Walnut Creek Working Group. The size of each regeneration area will depend on the silvicultural needs of the stand and the land treatment prescriptions. Because the mixed-conifer type is so limited, it will be included in the ponderosa pine management program with no special treatment prescribed.

B. Rotations

	Prescott Working Group	Walnut Creek Working Group	Administrative Working Group
Rotation Period	100 years	120 years	200 years
Rotation Age	90 years	110 years	190 years

A 30% reduction in total board foot volume harvested over the rotation period is expected in the Prescott Working Group by reducing the rotation period from 120 years to 100 years. Since the working group will be managed primarily for utility poles, this will not be an economic loss. The increase in number of stems and cubic foot volume per acre will off set the loss in board foot volume (Technical Bulletin 630, Table 21).

C. Methods of Cutting

These are grouped broadly into three main classes: intermediate cutting, salvage cutting, and regeneration cutting. Refer to FSM 2471.

1. Intermediate Cutting

This is synonymous with stand tending and is the cutting that is done anytime between stand establishment and the planned stand regeneration. At any one stand entry, the following various methods may be used in combination or individually.

a. Cleaning (Liberation) Cutting

This cutting is made in a young stand, not past the sapling stage, to liberate crop trees from other trees of similar species with less desirable form or from trees of a less desirable species.

b. Weeding Cutting

This cutting is made in a young stand, not past the sapling stage, to free the small trees from weeds, brush, chaparral, vines, sod-forming grasses, or other competing vegetation.

c. Thinning Cutting

This cutting is made in an immature stand primarily to increase the rate of growth of the residual stand by reducing the stand to the optimum basal area. In actual practice any intermediate cuttings could be considered thinning cutting.

d. Release Cutting

This cutting is made in an immature stand to free the crop trees from excessive competition by removing the excess vegetation, undesired species, or undesired age class (such as a young age class which because of excessive numbers is competing severly with an older, but desired, regulated age class).

e. Improvement Cutting

This cutting is made in an immature stand to improve the stand composition by removing trees of poor form and/or genetic qualities.

f. Risk Cutting

This cutting is made to remove trees that are likely to die before the next periodic cut.

g. Sanitation Cutting

This cutting is made to remove trees infected with disease or infested with insects in order to reduce the disease and insect incidence in the stand.

h. Salvage Cutting

This cutting is made to remove merchantable dead trees or live trees that have been successfully attacked by a killing agent before the trees become worthless.

i. Cutting to Release From Unmerchantable Overwood

This cutting is made to free the residual, featured age class and species from overwood unmerchantable stems or species.

2. Salvage Cutting

This cutting is made anywhere in the forest outside a current, contract timber sale area. It is made as an unregulated cutting to recover otherwise wasted material which is ordinarily classed as mortality. Merchantable dead trees or live trees that have been successfully attacked by a killing agent are recovered as they are found throughout the forest.

3. Regeneration Cutting

This cutting applies generally to stands of rotation or greater age. It applies to all cutting in virgin stands and to all cutting in cutover stands where the overwood components of the stand are over rotation age. The cutting will be seed-tree or shelterwood cutting as the source of the new stand is to be from seed produced by trees standing on the cutover area.

a. Preparatory Cutting

This cutting is used in a stand which has more than two identifiable age class components in the overwood portion of the stand. This cutting, then, is used to remove only the oldest age class and the dying and defective trees of all age classes. A manageable understory older than the 1-20 age class may be present in the stand. Use of this cutting implies that the manageable understory will be released from all overwood competition in a future cutting.

b. Seed-tree Cutting

This cutting is the removal of all the mature timber in a stand except for the number of seed trees which are needed to provide seed for reproducing the stand. A minimum of five seed trees per acre will be needed. This cutting also provides the openings where reproduction may be started. During this cutting the site will be prepared to receive the seed.

c. Removal Cutting

This cutting is done to remove the seed trees when adequate reproduction above browse height has been established. If reproduction cannot be established from the seed trees or a seed crop has not occurred within five years after the seed-tree cutting, the seed trees will be removed and reproduction will be established by planting or by direct seeding.

This cutting is also used in a stand which has a manageable understory of advanced reproduction (1-20 age class) or another under-rotation-age age class (older than the 1-20 age class but less than 120 years old). The seed-tree cutting is by-passed and all overwood is removed in one cutting.

D. Stand Treatment Priorities

Stand treatment priorities for cutting are established in accordance with silvicultural factors and utilization principles. Generally, the stands will be cut in the following order:

1. Stands killed or badly damaged by fire, insects, disease, or wind.

2. Virgin stands.

3. Stands heavily infected with dwarfmistletoe.

4. Stands where reproduction must be established. This will be done in stands that are understocked, are of low quality, or otherwise in an inferior condition.

5. Stands with above optimum basal area stocking.

6. Stands over rotation age.

b. Seed-tree Cutting

This cutting is the removal of all the mature timber in a stand except for the number of seed trees which are needed to provide seed for reproducing the stand. A minimum of five seed trees per acre will be needed. This cutting also provides the openings where reproduction may be started. During this cutting the site will be prepared to receive the seed.

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D. Stand Treatment Priorities

Stand treatment priorities for cutting are established in accordance with silvicultural factors and utilization principles. Generally, the stands will be cut in the following order:

1. Stands killed or badly damaged by fire, insects, disease, or wind.

2. Virgin stands.

3. Stands heavily infected with dwarfmistletoe.

4. Stands where reproduction must be established. This will be done in stands that are understocked, are of low quality, or otherwise in an inferior condition.

5. Stands with above optimum basal area stocking.

6. Stands over rotation age.

E. Special Treatment

1. Recreation Areas

These areas will be managed as a part of the Administrative Working Group.

Timber on improved recreation areas, sites classified for development and designated Waterfront and Travel Zones will be managed in accordance with the Chief's policy as stated in FSM 2405.12 and FSM 2310.2. Each area or zone in or adjacent to a proposed sale area will be considered for treatment at the time of sale preparation, other cultural treatment, or when necessary in connection with recreation purposes. Recreation resource management specialists and the landscape architect will prepare the prescription for treatment and select the trees for cutting.

2. Wildlife Areas

In general, the intensification of timber management will benefit wildlife, particularly the big game food supply. However, careful attention to a number of cultural details is required for best results. They should neither result in the permanent elimination of timber production on significant areas of commercial forest land, nor significant reduction in the yield of forest products of merchantable size and quality.

Adequate wildlife openings will be designated for each compartment of the commercial Forest during compartment examination.

Guides for good wildlife habitat are found in FSH 2631 and suggestions for consideration in the coordination of these needs with timber management are found in FSM 2405.14.

3. Watershed

One of the primary objectives of multiple use management is the production of good water and control of stream sedimentation. The Forest is the prime protector of water quality.

The selection of regeneration areas should be such that watershed values are protected. Site preparation involving soil manipulation necessary for the regeneration of trees must be allowed for the increased benefit derived from the resulting timber stand. Necessary site preparation must be done in a manner which will control soil movement.* On devastated areas (burns, blowdowns, etc.), vegetative competition will be eliminated before planting or seeding, either by removal in strips placed on contours or by removal on large areas where the soil will be terraced by contour plowing.

Logging damage must be minimized by proper location of roads and skid trails. Check dams will be built and grass species planted on all but regeneration areas.

The City of Prescott Watershed lies within the working circle. Some 17,000 acres of commercial forest land, which consists of approximately 3,500 acres of private land, serve this function. The first 6,000 acres included in the watershed were the Groom Creek and Bannon Creek areas south of Prescott. This was set up by the agreement of April 25, 1924, between the Secretary of Agriculture and the City of Prescott. The agreement restricted use to "as great an extent as possible" except for timber use and the construction of roads, trails, telephone lines, and other rights-of-way. The agreement further specified that (1) sanitary precautions within the area may be required by the City subject to approval by the Secretary. Clearance from and advice of City officials should be obtained if camps or sawmills are to be set up in the area. (2) The approved methods of silviculture and Forest management are to be applied by the Forest Service to extend and improve the Forests. (3) If additional fire guards or patrol are needed because of this Cooperative Agreement, they will be furnished by the City under Forest Service supervision. This provision might well be used advantageously for the first few years following cutting in the watershed.

The risk of fire following logging on the watershed will be high, but no higher than cutting areas on the balance of the working circle. However, due to the special watershed function, extra fire precautions may be desirable.

General cutting practices may have to be modified to give continuous cover protection to prevent excessive stream sedimentation and insure a continuous supply of good water. A study of this particular site would have to be made before a specific modification of silvicultural

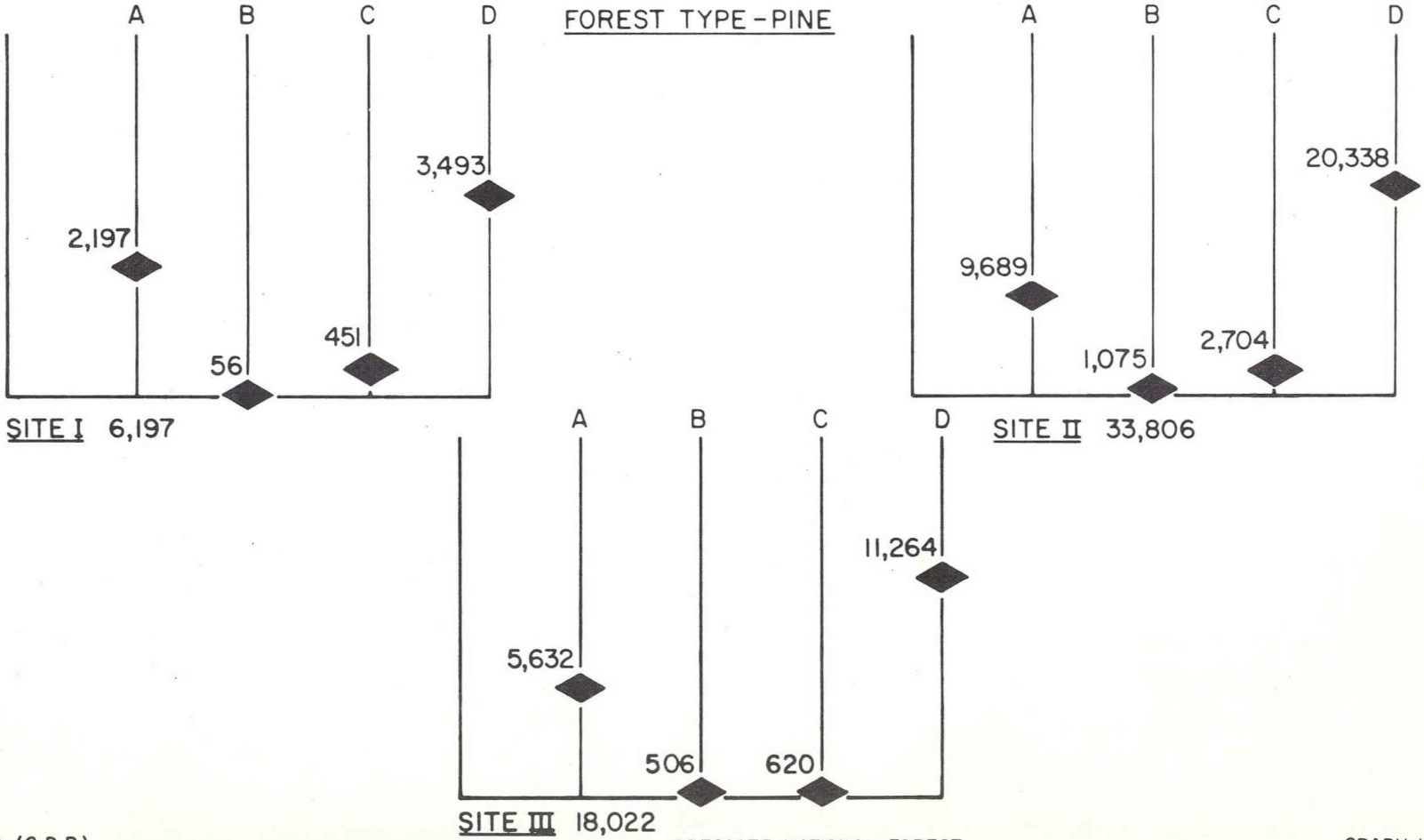
* Graph #13, Visible Erosion

EROSION

A. No movement
B. Gullies
C. Rills
D. General surface movement

ALL FIGURES REPRESENT ACRES

FOREST TYPE - PINE



practices would be possible. Until such a study is made, the following precautions will be taken.

(a) A good forest cover will be maintained without the aid of temporary cover or nurse crops such as grass and brush.

(b) Prompt rehabilitation of all unavoidably disturbed areas will be required on all contracts.

(c) The size of all regeneration areas will be reduced throughout the watershed.

(d) Artificial reforestation will have the highest priority in the watershed area.

(e) Special attention will be given to location of skid trails and roads to prevent excessive erosion.

4. Power Line Rights-of-Way

Special use permits will specify that land beneath power lines may be used for other forest purposes. Wildlife browse and feed species may be grown on this land. The land may be used for any forest purpose as long as it does not interfere with the power lines.

5. Crown King District

The Crown King District contains 20,095 acres of currently inaccessible timber lands. 5,400 acres of this land is in a tentative Administrative Working Group. Intensive timber management in this area is not economical at this time due to lack of access roads.

A limited amount of stand improvement will be done in the form of sanitation and safety-hazard cutting within the recreation areas. These cuttings will be prescribed as needed. Precautions must be taken when material over 3" in diameter is cut and left on the ground in large quantities. Bark beetle infestation could become a problem.

There are 7,000 acres of operable timber on the Crown King District that is not included in the annual allowable cut. The poor access road would make hauling of logs economically impossible from the area. Therefore, a small portable mill located on private property would be the only feasible means of harvesting the timber. A 100% slash disposal program would be required due to the recreational use of the area. During the recreational season, hauling of rough lumber would have to be done during the night to reduce the safety hazard on the narrow, winding access road. A sustained annual yield could not be maintained. Therefore, periodic cuts would be the policy.

The local market for forest products is small, but the demand for mining timbers, firewood, and fence posts should be met and encouraged.

F. Cultural Treatments

1. Precommercial Cleaning and Noncommercial Thinning and Release

The working circle contains numerous sapling and small pole stands that need precommercial cleaning and thinning. No market exists for these small stems, with the possible exception of corral poles and firewood. Therefore, following cleaning and thinning, the fire danger will be increased for a period of three to five years depending on the volume left on the ground. At the end of this period, the fire danger may be about the same, or even less than existed prior to cutting.

The objective of the cleaning and thinning program should be to increase the present growth rate by reducing the basal area to that compatible with the site. Dwarfmistletoe infected stands have priority in treatment.

A 10-year thinning program is shown in Section VIII.C and thinning areas on maps in the Appendix.

2. Commercial Thinning

There are many stands in the working circle that need thinning. Little thinning has been done in the past because no markets existed. Pulpwood is not in demand and the small house log plant that is presently operating can not use the total volume of small pole size material available. If full utilization of our forest products is to be obtained, a market for pulpwood must be developed. A 5-year potential pulpwood cut is included in Section VI.G.

The objective of commercial thinning is to reduce the stand density by utilizing cut material for forest products and by leaving a residual stand that has a basal area optimum for its site. Dwarfmistletoe infected and insect infested stands will have priority in cutting.

G. Cutting of Other Products

Cutting of other products in the 980,000 acres of woodland type could be of significant importance on this working circle. There exists extensive areas of juniper that have value for fence posts and other products. In recent years, little or no importance has been attached to these areas.

As new information is gathered and improved methods are learned in wood utilization, this woodland will be utilized to its fullest extent. For this plan, however, this type will be discouraged from encroaching into natural openings and the commercial timber zone.

Christmas tree cutting in the timber zone, particularly the white fir and Douglas-fir areas, has been discouraged in the past. Ponderosa pine is not in demand for Christmas trees. Therefore, the estimated 2,000 acres producing mixed-conifer would be the only possibility for Christmas tree production. Of the 2,000 acres 1,500 is presently classified as inoperable. Rough, steep topography makes the management of these

acres impossible. The 500 operable acres are located in small strips and blocks between patented and unperfected mining claims. It has been decided that the high cost of sales administration would not be justified for the small potential market. The Forest will continue its present policy of cutting only pinyon and juniper for Christmas trees.

A small market exists for cordwood, primarily oak and juniper, for firewood. Walnut Creek, which has a problem obtaining natural reproduction due to competing species, would be a prime area to encourage cutting. If a substantial market is developed, it will be controlled by area.

ACTION PLAN

1965 TIMBER MANAGEMENT PLAN
Prescott Working Circle
Prescott National Forest

Sections VI, VII, VIII, and IX

REVIEW AND REVISION CONTROL SCHEDULE

Fiscal Year	Forest Supervisor: Reviewed by: Name	Reviewed by: Date	Revised by: Name	Revised by: Date	No Rev. Needed: Name	No Rev. Needed: Date	Regional Forester: Approved by: Name	Approved by: Date
1965	Working Circle Plan Prepared by Horace D. Morgan,					3/15/64		
1966								
1967								
1968								
1969								
1970								
1971								
1972								
1973								
1974								

Revised Working Circle Plan Prepared by: _____, Date _____

VI. MANAGEMENT CONTROLS

A. Inventories

This plan is based on an extensive timber inventory completed in 1964, using 103 1/4-acre plots. Each 1/4-acre plot was supplemented by 10 mechanically orientated prism points. All timber volumes were computed from the prism point data. All commercial timber areas had an equal chance of being sampled. The minimum requirement to qualify for a chosen sample point was that at least one stem of a commercial species be present. This low minimum requirement was necessary due to the marginal nature of an estimated 30% of the working circle's timbered acres.

The 1/4-acre plots were permanently established in accordance with Regional standards. An inventory folder for each inventory plot will be maintained in the Forest Supervisor's Office. The folder will contain the extensive timber inventory growth plot location sheet (Form 2400-49) and an aerial photograph that shows the location of the inventory plot.

The standard error of the mean estimate was ± 9.01%. The Regional minimum acceptable error is ± 10.00%. The inventory was within the acceptable level. Therefore, additional 1/4-acre plots will not be established.

B. Compartment Examination

The working circle has been divided into 185 partially timbered compartments, over the net commercial forested land of 92,449 acres. This gives a net timbered average of 500 acres per compartment. The gross acreage will be approximately 900 acres per compartment. The private land ownership pattern and the scattered nature of the timber zone makes it necessary to divide the working circle into such a large number of compartments.

Examination of the compartments, with detailed stand prescriptions, carries a high priority and will be completed prior to June 30, 1971. The goal for completion is by Fiscal Year 1968. The more important timber producing areas will be completed by Fiscal Year 1967. A minimum average of 45 compartments will be done annually, with an estimated gross area of 40,000 acres.

If possible, each compartment will be examined 2 years prior to entry for sales or cultural treatment. Aerial photographs and mosaics will be used in the examination. Individual stands in each compartment will be identified and delineated into age classes and the proper silvicultural treatment prescribed. A folder will be maintained for each compartment. Pertinent information on site indexes, stand sizes and ages, yields from the methods of cutting, logging methods, transportation layouts, and other records and plans will be kept.

A compartment examination schedule is made part of this plan. This schedule is correlated with the cutting budget where possible, and is subject to change by the Forest Supervisor. See Appendix for Compartment Examination Schedule.

C. Regeneration Controls

Regeneration is a problem which must be successfully dealt with on the working circle during this cutting period. Natural regeneration without seedbed preparation has not been successful in the past. This indicates that special considerations must be given to regeneration prior to all timber harvests.

Regeneration controls will be prescribed three years in advance of cutting. A control record will be kept and submitted to the Forest Supervisor annually. This advance notice will provide time to make the necessary adjustments in grazing programs, game use of the area, and to control rodents and other pests. (See example in Appendix).

Effort during the next 10 years will be directed toward reforesting burned areas in the Prescott Technical Working Group and understocked areas in the Walnut Creek Working Group. Techniques will be developed during the first cutting period to enable the Forest to satisfactorily regenerate the ponderosa pine type.

1. Natural Regeneration

The five to fourteen seed trees per acre, which is accepted as being satisfactory for the Region, may not be adequate for the working circle. Brush invasion into the marginal sites must be controlled by maintaining adequate timber cover. Therefore, an administrator needs a certain degree of freedom to select the number of seed trees for a given set of conditions. The only requirement of this plan is that a minimum of five seed trees per acre be maintained if sufficient advance reproduction does not exist. These seed trees will be cut when reproduction has been established for three years.

Site preparation which includes removal and/or destruction of competing vegetation in strips along contours will be used to aid the establishment of seedlings. Protection from livestock will be prescribed.

2. Artificial Regeneration

Artificial reforestation will be done on an area if sufficient reproduction is not evident five years after cutting. Site preparation will be necessary regardless of the regeneration method used. This is necessary for seedling survival and to provide bare mineral soil for direct-seeding or planting of ponderosa pine.

Direct-seeding has proven successful in areas comparable to this working circle. This method will be used to obtain regeneration wherever possible. The required amount of seed for good results is not static. It is known that nature regenerates an area by saturating it with seed, but this would be economically impossible to duplicate. However, through control of seed predators and grazing, with seedbed preparation and proper seed placement, good results can be obtained with a greatly reduced amount of seed.

If possible, only local seed will be used. Efforts will be made to locate and record trees and areas of high seed-producing capabilities. The seed will be collected when a good cone crop is predicted. This is normally every three to five years.

On areas where topography is not limiting, 2-1 planting stock may be used. Mechanical site preparation and planting must be employed if costs are to be kept within reason. Refer to FSM 2472 for field planting instructions.

D. Calculation of Planned Cut

All cutting and entry will be controlled by area, with volume checks. Present calculations for available annual cut are considered to be as accurate as present information allows, but are intended only as a guide to provide a basis for planning. Volume cut on a particular acre will be controlled by need and by basal area controls. Area can be selected to harvest approximately the same volume annually. As cutting records are developed for each five-year period, the allowable cut can be adjusted by experience.

E. Marking Rules

Marking guides for each stand will be set up during compartment examination. Refer to FSH 2442.8. The marking decisions will be such to leave the optimum basal area density in the most vigorous, best formed, healthy trees in the residual stand.

F. Records

Records will be kept in accordance with Regional requirements.

G. Cutting Budget

Sawtimber and utility pole cutting budgets are included here. No cutting budget is included for pulpwood. See 5-Year Potential Pulpwood Cut in Appendix Section X, C-6.

TABLE 12

Prescott Block Sawtimber and Pole Cutting Budget - 10 Years
F.Y. 1965 Through F.Y. 1974
Prescott Working Circle
Prescott National Forest

Fiscal Year Planned for Cutting	Sale Unit: Block or District	Sale Unit: Name	Sale Unit: Map Designation	Total Net Acreage	Gross Volumes 1/: Scribner 2/ M Bd Ft	Gross Volumes 1/: International 1/4" Rule M Bd Ft	Gross Volumes 1/: M Cu Ft	Utility Poles: M L. Ft	Utility Poles: No. Pieces
Timber under contract but uncut as of July 1, 1964									
1965	Prescott	Wolf Creek	I	7,265	22,155	25,478	5,826	1,213	52,671
1966	Prescott	Wolf Creek	I						
1967	Prescott	Wolf Creek	I						
Proposed Offerings									
1968	Prescott	Big Bug	II	7,140	21,261	24,470	5,726	1,192	51,765
1969	Prescott	Big Bug	II						
1970	Prescott	Big Bug	II						
1971	Prescott	Big Bug	II						
1971	Granite	Cold Spgs.	III	6,900	20,548	23,630	5,534	1,152	50,025
1972	Granite	Cold Spgs.	III						
1973	Granite	Cold Spgs.	III						
1974	Granite	Cold Spgs	III						
1974	Granite	W.Copper Cr	IV	700	2,084	2,397	561	117	5,075

1/ Total Average Gross Volume Per Acre Used to Compute Total Volume (2,978 Bd. Ft. -- 7.25 stems - 167 linear ft. -- 802 cu. ft.) Converting Factor to International $\frac{1}{4}$" Bd. Ft. = 1.15

2/ Utility Pole Bd. Ft. Volume Included.

TABLE 13

Walnut Creek Block Sawtimber Cutting Budget - 10 Years
F.Y. 1965 Through F.Y. 1974
Prescott Working Group
Prescott Working Circle

Fiscal Year Planned for Cutting	Sale Unit: Block or District	Sale Unit: Name	Sale Unit: Map Designation	Total Net Acreage	Gross Volumes 1/: Scribner M Bd Ft	Gross Volumes 1/: International 1/4" Rule M Bd Ft	Gross Volumes 1/: M Cu. Ft
Timber Planned to be Under Contract but uncut as of July 1, 1964:							
1965	Walnut Cr.	Juniper Mesa	I	3,000 2/	8,118	9,335	1,867
1966	Walnut Cr.	Juniper Mesa	I				
Proposed Offerings							
1967	Walnut Cr.	Camp Wood	II	3,800	10,282	11,762	2,364
1968	Walnut Cr.	Camp Wood	II				
1969	Walnut Cr.	Camp Wood	II				
1970	Walnut Cr.	Camp Wood	II				
1971	Walnut Cr.	Yolo-7 Up	III	4,500	12,177	14,003	2,801
1972	Walnut Cr.	Yolo-7 Up	III				
1973	Walnut Cr.	Yolo-7 Up	III				
1974	Walnut Cr.	Yolo-7 Up	III				

1/ Total Average Gross Volume Per Acre Used to Compute Total Volume (2,706 Bd. Ft.). Converting Factor of 1.15 used to Convert Scribner to International. Converting Factor of .230 for Cu. Ft. from Scribner Bd. Ft.

2/ 1,400 Acres Optional Timber-Cutting depends on economical access road.

VII. TIMBER DISPOSAL POLICIES

A. Sales

Sales will be made with the objective of harvesting the allowable cut of the working circle by 5-year periods. Offerings will be made in units of such size as to fit the needs of the operators of small and medium-sized mills typical of the industry of this area. The cutting of the full allowable cut will be controlled through timing and size of the timber sales. Large or long term sales that exceed four years are not anticipated.

Compartment examination is in the early stages of development on the working circle. Once it is completed and prescriptions are available for the individual stands, cutting will be controlled by compartments.

B. Point of Manufacture

It is not necessary or desirable to have any specific requirements for points of manufacture in the sale of National Forest timber from this working circle. There are a sufficient number of local mills to handle the annual yield, with the exception of small pole timber. The development of a pulpwood or similar market is definitely needed.

C. Utilization Standards

The provisions in the FSM and in the standard contract clauses with respect to utilization and merchantability standards are satisfactory for this working circle.

D. Logging Methods

A majority of the timber sales on the Prescott Working Circle are made to small operators that have a limited amount of capital to invest in logging equipment. This factor, plus the practice of harvesting small sawlog-size trees, indicates that rubber-tired tractor skidding is the best logging method to use. Crawler-tractors are required on steep slopes and when other topographic factors are limiting.

Full tree lengths may be skidded if precautions are taken to reduce damage to the residual stands. Tree lengths over 48 feet should not be skidded except for utility poles.

E. Erosion Control

Strict supervision is required in all timber sale areas to insure compliance with the contract's erosion preventative measures. Timber sales will include special provisions and requirements not adequately covered in the standard sale contract clauses, if compartment examinations of the area so indicate.

Special erosion control work will be necessary on the steeper slopes near the upper limit of accessibility and on the soil types which future soil surveys identify as most erodible.

F. Slash Treatment

Slash treatment plans will be prepared for each timber sale based on obtaining the best fire and soil protection that the available funds will provide. The standards will be in accord with multiple-use objectives and vary with forest type, cutting methods, size of areas, risk, fuels, topography, values, and area use designation. Esthetic values will be given special consideration when a timber sale unit is located near or adjacent to recreation areas, subdivisions, and similar areas.

G. Small Products and Special Sales

The use of minor forest products will be encouraged. The possibility of a market for treated ponderosa pine fence posts will be explored and supported. The use of ponderosa pine for cordwood as well as oak and Juniper will be encouraged.

Other small sales such as wildings, bee trees, and manzanita for ornamental purposes will be continued in the future. These sales are subject to the provisions in the Forest Service Manual and Handbook.

VIII. FOREST DEVELOPMENT

A. Transportation

The primary roads necessary for the continued harvest of operable timber from the Prescott Working Circle have already been constructed or will be constructed during the period covered by this plan. As harvesting operations progress, many of the existing roads will be reconstructed along with the construction of secondary and spur roads.

Table 14 lists the proposed road program for the next ten years. Only those roads required for timber purposes are entered. The amount of purchaser road construction has not been determined for other than current timber sales. When this information becomes available, it will be considered a part of this plan.

B. Reforestation

The only provision for reproduction in the past Management Plan was to maintain an adequate seed source. This has resulted in an estimated 6,000 acres of seriously understocked stands on the Walnut Creek Block and 3,000 acres of nonforested land on the Prescott Block. Combined, this acreage equals one-sixth of the Forest's operable, timbered area. It is evident that provisions must be made at this time to insure adequate reproduction.

The removal of competing species and site preparation in an attempt to obtain natural reproduction is planned for the Walnut Creek Block. Alligator juniper and the oak species will be removed by cutting and poisoning or some comparable method that will eliminate sprouting. The release and weeding will be done prior to the site preparation program. Site preparation may be done by any approved method as long as it is economical and a sufficient amount of mineral soil is exposed. Plowing on contours is recommended.

On nonforested areas (burns) on the Prescott Block, direct seeding will be used. A ponderosa pine seed collection program will be necessary to obtain local seed. If this is not possible, seed from Coconino or Kaibab National Forests will be used. Prior to seeding an area, competing species will be removed in conjunction with seedbed preparation. Protection from livestock and wildlife will be prescribed as needed.

Rodent population studies will be conducted prior to seeding and the necessary control measures taken.

Tables 15 and 16 included in this section list the areas where treatment is needed. The recommended treatment in this plan is subject to change as improved planting techniques are developed throughout the Region.

TABLE 14

TRANSPORTATION SYSTEM DEVELOPMENT NEEDED
F.Y. 1965 Through F.Y. 1974
Prescott Working Circle
Prescott National Forest

F.Y. of Planned Sale	Block (District) Name	Block (District) Number	Compartment Name	Sale Unit Name or Desig.	Map No.	Road Ident. Name	Road Ident. Number	Design Class	Character of Work*	F.S. to Construct Mi.	F.S. to Construct Cost	Purchaser to Construct Mi.	Purchaser to Construct Cost	Totals Mi.	Totals Cost	F.Y. in which roads should be completed Eng. Survey	F.Y. in which roads should be completed Construction
Roads Planned or Under Construction As Of July 1, 1964																	
1967	Prescott	4	11.02	Big Bug	II (13)	Big Bug Mesa	9103	SN12	NC	4.0	45,000						
		4	11.03	Rough					RC			4.5	5,000	8.5	50,000	1966	1968
1967	Prescott	4	12.01	Dandrea													
		4	12.02	Yankee Doodle													
		4	19.02	Spring	II (13)	Big Bug	9670	SN12	NC	6.0	200,000	-	-	6.0	200,000	1965	1967
		4	19.03	Goodwin													

* NC = New Construction
RC = Reconstruction

TABLE 15

Prescott Block

Areas of Possible Treatment under the Artificial Regeneration Program
F.Y. 1965 through F.Y. 1984
Prescott Working Circle
Prescott National Forest

Fiscal Year Planned For	Block or District	Compartment Name	Compartment No.	Regeneration Units Unit Designation	Regeneration Units Net N. F. Acres	Treatment
1965	Prescott	School House	404.03	1	250	Site Preparation - Direct Seeding
		Indian	405.01	1	250	" " " "
1969	Prescott	Wolf	406.02	2	600	Site Preparation - Direct Seeding
		Pay Off	406.03	2	100	" " " "
1974	Chino Valley	So. Mingus	117.01	1	150	Site Preparation - Direct Seeding
		Black Can.	120.01	1	600	" " " "
		Brindle Pup	120.02	1	150	" " " "
		Kendall	121.01	1	700	" " " "
		Pine Flat	122.01	1	100	" " " "
		Tiny	122.02	1	100	" " " "

TABLE 16

Walnut Creek Block

Areas of Possible Treatment Under the Regeneration Program-20 Year

F.Y. 1965 through F.Y. 1984

Prescott Working Circle - Prescott National Forest

Fiscal Year Planned For	Compartment NAME	Compartment Number	Regeneration Unit: Unit Designation	Regeneration Unit: Net N.F. Acres	Recommended Treatment 1/
1965	N. Gobbler Knob	602.08	1	277	Removal of competing species (cut and poison)
1966	Mud Springs	603.06	2	320	" " " " " " "
				597	Seedbed preparation (mech. plow on contours)
1967	Dead Steer	614.01	3	100	Removal of competing species (cut and poison)
	Granite Knob	614.02	3	315	" " " " " " "
1968	Hyde Mtn.	614.03	4	220	" " " " " " "
				635	Seedbed preparation (mech. plow on contours)
1969	Pinon	613.01	5	400	Removal of competing species (cut and poison)
1970	Slingshot	613.02	6	200	" " " " " " "
				600	Seedbed preparation (mech. plow on contours)
1971	Slingshot	613.02	6	430	Removal of competing species (cut and poison)
1972	Camp Wood	620.04	7	160	" " " " " " "
				590	Seedbed preparation (mech. plow on contours)
1973	Stringtown	620.01	8	120	Removal of competing species (cut and poison)
	Stinson	620.02	9	210	" " " " " " "
1974	Pine Flat	620.03	10	110	" " " " " " "
	Paddock	619.02	11	280	" " " " " " "
				710	Seedbed preparation (mech. plow on contours)
1975	Puma	619.01	12	500	Removal of competing species (cut and poison)
1976	Switchback	618.01	13	320	" " " " " " "
				820	Seedbed preparation (mech. plow on contours)

(continued)

TABLE 16 - continued

Fiscal Year Planned For	Compartment NAME	Compartment Number	Regeneration Unit Unit Designation	Regeneration Unit Net N.F. Acres	Recommended Treatment 1/
1977	Connell	618.02	14	200	Removal of competing species (cut and poison)
	Connell Gulch	618.03	15	150	" " " " " " "
1978	Stubbs	617.02	16	175	" " " " " " "
	Yolo	617.01	17	150	" " " " " " "
				675	Seedbed preparation (mech. plow on contours)
1979	Triangle HC	616.03	18	370	Removal of competing species (cut and poison)
1980	Antelope	616.02	19	75	" " " " " " "
	Pine Creek	616.01	20	250	" " " " " " "
				695	Seedbed preparation (mech. plow on contours)
1981	Pine Creek	616.01	20	200	Removal of competing species (cut and poison)
1982	Seven Up	615.04	21	420	" " " " " " "
				620	Seedbed preparation (mech. plow on contours)
1983	Seven Up	615.04	21	150	Removal of competing species (cut and poison)
	Camp Wood Mtn.	615.05	22	75	" " " " " " "
	Pine Top	615.03	23	400	" " " " " " "
				625	Seedbed preparation (mech. plow on contours)

1/ Seedbed preparation will be done during the two-year period following the removal of competing species. Alligator juniper will be cut and poisoned and oak will be poisoned.

C. Timber Stand Improvement

Cultural practices on the Prescott Working Circle will be prescribed by compartments as each compartment is examined. Tables 17 and 18 list the 10-year thinning program. The removal of competing species should be done in conjunction with thinning on the designated areas.

Walnut Creek Block, which is understocked, requires an active competing-species control program. The program is listed in Table 16 as part of the reforestation program. Much of this should be done with P&M funds.

Commercial and noncommercial thinning will be the major timber stand improvement practices on the Prescott Block, which is overstocked in the 41 to 60-year-old age class. Regional guidelines will govern the thinning practices.

Pruning on the working circle will be a minor program. It will be done in recreation areas as needed and on pole stands on the Walnut Creek Block that are on high sites and are not infected with dwarfmistletoe and/or red rot. Regional guidelines will govern practices under this program.

TABLE 17
Prescott Block

Planned 10-Year Timber Stand Improvement Program

Fiscal Year Planned For Project	Block or District Name	Compartment Name	Compartment Number	Thinning Unit Unit Designation	Thinning Unit Net N.F. Acres	Treatment
1965-68	Prescott					Noncommercial Thinning
		Watson Spr.	411.01	1	700	" "
		Big Bug	411.02	1	400	" "
		Rough	411.03	1	100	" "
	Granite	Granite Basin Lake	309.01	4	20	" "
1969-70	Prescott	Pay Off	406.03	2	400	" "
		Dosoris	414.01	2	400	" "
	Granite	Cold Spring	318.01	1	100	" "
		Copper Basin	317.03	1	100	" "
1971-72	Prescott	Hassayampa	407.04	2	100	" "
	Granite	Aspen Creek	319.01	2	160	" "
1972-74	Prescott	Benjamin Gulch	403.02	3	150	" "
		Antelope	403.03	3	150	" "
		Sawmill	403.04	3	150	" "
		Bannie	402.01	3	150	" "
	Granite	Private	325.01	3	200	" "
		Willow	325.02	3	400	" "
		Thumb Butte	317.01	3	300	" "

TABLE 18

Walnut Creek Block

Planned 10-Year Timber Stand Improvement Program

Fiscal Year Planned For Project	Compartment Name	Compartment Number	Thinning Unit Unit Designation	Thinning Unit Net N.F. Acres	Treatment
1965	Connell	618.02	1	50	Noncommercial Thinning
	"	"	3	20	Commercial "
1966	"	"	1	50	Noncommercial "
	"	"	3	20	Commercial "
1967	"	"	1	50	Noncommercial "
	"	"	3	20	Commercial "
1968	"	"	1	50	Noncommercial "
	"	"	3	20	Commercial "
1969	"	"	1	50	Noncommercial "
	"	"	3	20	Commercial "
1970	"	"	1	50	Noncommercial "
	"	"	3	20	Commercial "
1971	Pinon	613.01	2	50	Noncommercial "
	Connell	618.02	3	20	Commercial "
1972	Slingshot	613.02	2	50	Noncommercial "
	Connell	618.02	3	20	Commercial "
1973	Slingshot	613.02	2	50	Noncommercial "
	Connell	618.02	3	20	Commercial "
1974	Stringtown	620.01	2	50	Noncommercial "
	Connell	618.02	3	20	Commercial "

D. Fire Control

Fire Control activities on the working circle will continue on the high plane set in the past. Fire Control plans are set forth in the Prescott National Forest Fire Plan, which is revised annually. A fire plan will be prepared for each advertised timber sale. The plan will be reviewed with the operator annually to assure compliance with the sale contract and fire plan revisions.

As previously stated in Section IV, increased recreation use is expected during the next decade. Since our larger fires are caused by man, better fire protection in the form of slash disposal and detection may be necessary. Revisions will be made as required and entered in the Forest Fire Plan.

The thinning and weeding program as outlined in this Management Plan will result in large volumes of slash. If this slash is left on the ground, the fire hazard will be increased for a three to five-year period. After that, the fire hazard will be less than before thinning and weeding.

E. Rodent Controls

There is little evidence that Abert squirrels and porcupines are causing an appreciable amount of damage on this working circle. Therefore, no special controls other than those prescribed by the Arizona Game and Fish Commission are necessary.

The amount of damage to reproduction accredited to seed predation is not known. A survey of this problem is needed and should be conducted in the near future. As a safety precaution, until such a survey can be made, rodent control measures will be required on all artificial regeneration areas.

F. Animal Control

Regeneration will be protected from domestic stock through proper stocking, distribution, salting, fencing of waters, and total exclusion, if necessary. Areas planned for regeneration measures will be brought to the attention of the Forest Supervisor three years prior to the beginning of actual ground work, in order that domestic grazing conflicts and other existing problems in animal use on the area may be anticipated and resolved.

Damage by wildlife is not a problem at present. The deer population on the Walnut Creek Block, which has presented a problem in the past, is being kept within acceptable limits by hunting pressure. All wildlife problems in conjunction with timber management activities will be correlated with the Arizona Game and Fish Commission.

G. Acquisition

Based on current information, the timber production of this working circle will not be affected by acquisition or exchange of lands during the next ten years. There is a certain amount of grazing land designated as exchange base, but no productive Forest sites are included.

Table 19, which lists the road rights-of-way needed for timber management purposes for the next ten years, is included here.

TABLE 19

ROAD RIGHTS-OF-WAY ACQUISITION NEEDED
F.Y. 1965 Through F.Y. 1974
Prescott Working Circle
Prescott National Forest

F.Y. of Planned Sale	Block (District) Name	Block (District) Number	Compartment Name	Sale Unit Name or Desig.	Sale Unit Map No.	Road Ident. Name	Road Ident. Number	Owner of Road or Land	Right-of-Way Distance Needed (Miles)	Right-of-Way Cost Estimate	F.Y. by which R/W is needed to allow road construction	Office which Will Secure Right-of-Way
Rights-of-Way on Which Action to Secure Has Been Started as of July 1, 1964												
								Arizona T&T Welshenbaugh Pritchett Hall Mining Claims				
1967	Prescott	412.01	Dandrea									
		412.02	Yankee Doodle	Big Bug	II (13)	Walker-Big Bug	9670	Sunrise Golden Rule Club C.P.Huntington President Cash-on-Delivery	1.4	10.00	1965	Prescott
		419.02	Spring									
		419.03	Goodwin									

End, Action Plan Section of

1965 Timber Management Plan

Prescott Working Circle

Prescott National Forest

IX. INSECT AND DISEASE PROBLEM

A. General Conditions

Serious losses due to insects are not known in the history of this working circle. However, small outbreaks of Arizona Five-spined Ips have occurred. Drought, reduced vigor from dwarfmistletoe infections, and concentrations of slash over three inches in diameter have been recognized as contributing factors. The estimated loss of merchantable volume at present is less than 1% of the total volume in the working circle.

Dwarfmistletoe is the most widespread growth-retarding agent in this area. It does not have a definite preference as to what age class it affects, but initial establishment appears to have been on ridge tops and areas of poor site conditions. The infection then spreads to the better sites. The current inventory indicates that 26% of the operable timber is infected by this parasite.

Red rot has caused the greatest loss of sawtimber volume on this working circle. It is far less conspicuous than dwarfmistletoe and seldom causes the death of infected trees. Poletimber, as well as sawtimber over rotation age, is infected. A 30% defect in board foot volume can be expected in virgin stands on the Walnut Creek Block. The current inventory indicates that 19% of all sawtimber and poletimber stems are infected to some degree.

Cronartium Rust, though more deadly than dwarmistletoe to individual trees, is less widespread and does not present a problem.

B. Special Problems and Specific Directions for Handling Each Problem

1. Disease

a. Dwarfmistletoe

Dwarfmistletoe is the principal death-causing disease occurring on the working circle. It is present in the better stands of pine as well as the marginal stands. Mortality, however, is not so serious as is the loss of increment in infected trees. Planned cutting will make possible the salvage of most of the presently infected trees. However, the problem is not merely to salvage infected trees, but to restrict the spread and eventually clear it from the stand. Periodic stand improvement operations can do much to aid in the permanent removal of dwarfmistletoe from the working circle.

The silvicultural control of dwarfmistletoe is directed toward restricting spread by removing the seed source. Infected trees in the overstory will be removed first; then infected poles will be cut. The cutting should not result in a drastically understocked stand. When this is evident, a 50-foot dwarfmistletoe-free strip will

be maintained around the infected stand, which will receive normal silvicultural treatment until it reaches rotation age. Light infections in the limbs of small trees outside the heavily-infected, isolated groups, will be eradicated by pruning, if the economics permit. Region 3 guidelines will govern sales and slash disposal practices for this dwarfmistletoe control program.

b. Red Rot

Red Rot, caused by a fungus, Polyporus anceps, is the greatest single disease causing loss in pine sawtimber volume on this working circle. Over-mature trees, bearing dead limbs on the lower portion of the bole, contain the greatest portion of heart rot encountered. In some stands, it is found in blackjacks, but not in such serious proportions.

The silvicultural recommendations in this plan will reduce the occurrence of red rot to an acceptable level.

(1) The planned 120-year rotation on the Walnut Creek Block and the 100-year rotation on the Prescott Block will eliminate the majority of the red rot once the initial cut is completed. This item alone will be the greatest single means of controlling the disease.

(2) Maintain proper spacing where possible through the pole state to promote natural pruning.

(3) Reduce to a minimum the number of cull logs and down timber left in the woods. In the future, these cull logs will not be of great importance as the disease is reduced.

(4) All commercial cutting should aim at improvement of boles to aid in the reduction of this disease. Potential red rot hosts can be spotted for removal by the presence of coarse limbs and the peculiar white mycelium in the broken branches.

2. Tree-Killing Bark Beetles

The Arizona Five-spined Ips is the only tree-killing beetle that has presented a problem in pine on this working cirle. It is commonly accepted that Ips are more active near the fringes of the ponderosa pine type. Assuming that this is correct, the marginal nature of this working circle would indicate that special precautions should be taken.

Prevention is the best cure. Therefore, the following measures will be taken in addition to maintaining a good, healthy, productive forest.

a. Logging will be continuous within a timber sale area. Completion of a logging unit will be done during the winter months when the activity of Ips beetles in the slash is at a minimum.

b. Cull logs, tops, and large limbs will not be concentrated in a timber sale area in such a manner to produce an epidemic population of Ips. Increased utilization should be encouraged.

c. All thinning programs will include provisions to eliminate excessive amounts of slash over three inches in diameter.

C. Handling Abnormal Conditions

Prompt reporting of Forest insect and disease outbreaks is of utmost importance. The Regional Office will be notified of other than endemic populations. Whenever the situation warrants, field personnel will collect specimens and submit them to the Regional Office for verification. This procedure will be conducted in accordance with the instructions in the Region 3 Handbook.

Detection surveys and field surveillance will be conducted on a planned basis to provide up-to-date information on insect conditions. These will include both ground and air surveys. All District personnel should be trained to detect insect and disease symptoms.

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18. Crown King District Multiple Use Plan. Prescott, Arizona. 1963.

19. Granite District Multiple Use Plan. Prescott, Arizona. 1963.

20. Prescott District Multiple Use Plan. Prescott, Arizona. 1961.

21. Verde District Multiple Use Plan. Prescott, Arizona. 1963.

22. Walnut Creek District Multiple Use Plan. Prescott, Arizona. 1961.

B. Statistical Analysis of 1964 Plot Inventory Data

Plot Volumes Were Projected to Per Acre Basis Prior to Statistical Analysis.

Number of Samples	N	= 103
Sum of Sample Volumes	$\leq X$	= 311,007
Sum of Squared Sample Volumes	$\leq X^2$	= 1,723,694,968
Mean (Average) Volume Per Acre	$\bar{x}$	= 3019.49
Standard Deviation From Mean	Sx	= $\pm$ 2760.00
Standard Error of Mean	$S\bar{x}$	= $\pm$ 272.19
Coefficient of Variation	C	= 91.41
Percent of Error	A	= $\pm$ 9.01

C. Increment and Allowable Yield Calculations

1. Calculation of Periodic Annual Growth

Normal mean annual growth per acre can be expected in this working circle if the basal area stocking per acre is maintained at levels lower than those of fully stocked stands. These levels are determined for ponderosa pine from Technical Bulletin 630, (5), and they are determined for Douglas-fir from Technical Bulletin 201, (6). The optimum stocking level is established as 57% of fully stocked basal area. The maximum stocking level is established as 80% fully stocked basal area.

At present, the actual stands average 36% understocked in relation to the established optimum stocking level. A portion of the periodic annual growth will be left on stems as a means of building the basal area stocking toward the optimum level.

Site index and basal area stocking for each overstory forest type and density class was determined from extensive inventory data collected in 1964. Basal area stand tables for each forest type were not prepared. Therefore, it was necessary to use averages from the inventory data for each mapped forest type.

Because of inadequate samples in the mixed-conifer type, an average site index of 80 was used. This should result in a conservative estimate in this type.

TABLE 20
CALCULATION OF PERIODIC ANNUAL GROWTH
PRESCOTT WORKING CIRCLE
PRESCOTT NATIONAL FOREST

Stand Symbol	Forest Type	Average Site Index	2/ Actual Basal Area Stocking Sq. Ft.	3/ Working Groups Acres 90 Yr.	110 Yr.	190 Yr.	4/ Basal Area at Full Stocking Sq. Ft.	5% of Full Basal Area Stocking Sq. Ft.	5/ Percent of Actual to 57% Full Stocking	6/ Per Acre Mean Annual Growth at Full Stocking 90	110	120	7/ Per Acre Periodic Annual Growth as Derived From Mean Annual Growth 90	110	190	8/ Working Circle Annual 90	110	Periodic Growth 190	9/ Per Acre Mean Annual Growth at Full Stocking 90	110	190	10/ Per Acre Periodic Annual Growth as Derived From Mean Annual Growth 90	110	190	Working Circle Periodic Annual Growth 90	110	190	11/ Per Acre Mean Annual Growth at Full Stocking 90	110	190	12/ Per Acre Periodic Annual Growth as Derived From Mean Annual Growth 90	110	190	Working Circle Periodic Annual Growth 90	110	190
	Ponderosa Pine									Net Scribner Bd. Ft.			Net Scribner Bd. Ft.			Net Scribner		Bd. Ft.	Net International 1/4" Bd.Ft.			Net International 1/4" Bd.Ft.			Net International 1/4" Bd.Ft.			Net Cubic Ft.			Net Cubic Ft.			Net Cubic Ft.		
P1gC	Cutover Sawtimber	68	135	884	166	249	181	103	131.07	101	136	163	132	178	214	116,688	29,548	53,286	192	213	212	252	279	278	222,768	46,314	69,222	47	44	33	62	58	43	54,808	9,628	10,707
			95	884	166	249	181	103	92.23	101	136	163	93	125	150	82,212	20,750	37,350	192	213	212	177	196	195	156,468	32,536	48,555	47	44	33	43	41	30	38,012	6,806	7,470
			63	1,281	241	361	181	103	61.16	101	136	163	62	83	96	79,422	20,003	34,656	192	213	212	117	130	129	226,737	31,330	46,569	47	44	33	29	27	20	37,149	6,507	7,220
	Total			3,049	573	859																														
P1=C	Cutover Sawtimber	64	90	1,207	840	482	175	99	90.90	81	114	146	73	103	132	88,111	86,520	63,624	161	186	193	146	169	175	176,222	141,960	84,350	44	41	31	40	37	28	48,280	31,080	13,496
			65	3,151	2,193	1,258	175	99	65.65	81	114	146	53	75	95	167,003	164,475	119,510	161	186	193	106	122	127	334,006	267,546	159,766	44	41	31	29	27	20	91,379	59,211	25,160
			30	2,348	1,634	936	175	99	30.30	81	114	146	25	35	44	58,700	57,190	41,184	161	186	193	49	56	58	115,052	91,504	54,288	44	41	31	13	12	9	30,524	19,608	8,424
	Total			6,706	4,667	2,676																														
P1-C	Cutover Sawtimber	60	80	3,341	1,091	1,054	169	96	83.33	61	93	129	51	77	107	170,391	84,007	112,778	130	158	174	108	132	145	360,828	144,012	152,830	41	38	29	34	32	24	113,594	34,912	25,296
			60	3,341	1,092	1,054	169	96	62.50	61	93	129	38	58	81	126,958	63,336	85,374	130	158	174	81	99	109	270,621	108,108	114,886	41	38	29	26	24	18	86,866	26,208	18,972
			31	10,023	3,275	3,162	169	96	32.29	61	93	129	20	30	42	200,460	98,250	132,804	130	158	174	42	51	56	420,966	167,025	177,072	41	38	29	13	12	9	130,299	39,300	28,458
	Total			16,705	5,458	5,270																														
P2gC	Cutover Poles	68	135	253	114	89	179	102	132.35	101	136	163	133	180	216	33,649	20,520	19,224	192	213	212	254	282	280	64,262	32,148	24,920	47	44	33	62	58	44	15,686	6,612	3,916
			95	253	115	89	179	102	93.14	101	136	163	94	127	152	23,782	14,605	13,528	192	213	212	179	198	197	45,287	22,770	17,533	47	44	33	44	41	31	11,132	4,715	2,759
			63	367	167	130	179	102	61.76	101	136	163	62	84	101	22,754	14,028	13,130	192	213	212	119	132	131	43,673	22,044	17,030	47	44	33	29	27	20	10,643	4,509	2,600
	Total			873	396	308																														
P2=C	Cutover Poles	58	90	789	511	294	164	93	96.77	53	83	122	51	80	118	40,239	40,880	34,692	120	147	163	116	142	158	91,524	72,562	46,452	38	37	27	37	36	26	29,193	18,396	7,644
			70	789	512	294	164	93	75.27	53	83	122	40	62	92	31,560	31,744	27,048	120	147	163	90	111	123	71,010	56,832	36,162	38	37	27	29	28	20	22,881	14,336	5,880
			0	0	0	0																														
	Total			1,578	1,023	588																														
P2-C	Cutover Poles	56	50	284	275	124	161	91	54.95	45	74	115	25	41	63	7,100	11,275	57,078	110	136	156	60	75	86	17,040	20,625	10,664	37	36	26	20	20	14	5,680	5,500	1,736
			30	780	764	344	161	91	32.97	45	74	115	15	24	38	11,700	18,336	13,072	110	136	156	36	45	51	28,080	34,380	17,544	37	36	26	12	12	8	9,360	9,168	2,752
			10	505	489	219	161	91	10.99	45	74	115	5	8	13	2,525	3,912	2,847	110	136	156	12	15	17	6,060	7,335	3,723	37	36	26	4	4	3	2,020	1,956	657
	Total			1,579	1,528	687																														
P1gV	Virgin Sawtimber	60	110		154		169	96	114.58		93			107			16,478			158			181			27,874			38			44			6,776	
			90		307		169	96	93.75		93			87			26,709			158			148			45,436			38			36			11,052	
			30		154		169	96	31.25		93			29			4,466			158			49			7,546			38			12			1,848	
	Total				615																															
P1=V	Virgin Sawtimber	53	90		255		159	90	100.00		59			59			15,045			120			120			30,600			34			34			8,670	
			70		1,064		159	90	77.78		59			46			48,944			120			93			98,952			34			26			27,664	
			23		808		159	90	25.56		59			15			12,120			120			31			25,048			34			9			7,272	
	Total				2,127																															
P1-V	Virgin Sawtimber	52	90		12		158	90	100.00		55			55			660			114			114			1,368			34			34			408	
			50		18		158	90	55.56		55			31			558			114			63			1,134			34			19			342	
			26		55		158	90	28.89		55			16			880			114			33			1,815			34			10			550	
	Total				85																															
				30,490	16,472	10,388							41	55	83	1,263,234	905,239	861,185				87	94	104	2,650,604	1,238,804	1,081,566				24	22	17	737,506	363,034	173,147
					57,350								Weighted Average - 53				3,029,678						Weighted Average - 92			5,270,974						Weighted Average - 22			1,273,687		
N	Non Stocked			3,006																																
	Mixed-Conifer																																			
MC1gC	Cutover Sawtimber	80	120	33		7	198	113	105.19	178		217	187		228	6,171		1,596	306		278	321		292	10,583		2,044	59		40	62		42	2,046		294
MC1=C	" "	80	80	98		21	198	113	70.71	178		217	126		153	12,348		3,213	306		278	216		197	21,168		4,137	59		40	42		28	4,116		588
MC1-C	" "	80	30	327		69	198	113	26.55	178		217	47		58	15,369		4,002	306		278	81		74	26,487		5,106	59		40	16		11	5,232		759
MC2gC	" Poles	80	120	33		7	198	113	105.19	178		217	187		228	6,171		1,596	306		278	321		292	10,593		2,044	59		40	62		42	2,046		294
MC2=C	" Poles	80	30	66		14	198	113	26.55	178		217	47		58	3,102		812	306		278	81		74	5,346		1,036	59		40	16		11	1,056		154
	Total			557		118							78		95	43,161		11,219				133		122	74,187		14,367				26		18	14,496		2,089
					675								Weighted Average - 81				54,380						Weighted Average - 131			88,554						Weighted Average - 24			16,585		
Working Circle Total					61,031								Weighted Average - 53				3,084,858						Weighted Average - 92			5,359,528						Weighted Average - 22			1,290,272		

1/ Compiled from inventory data. ($\frac{1}{4}$-acre plot, site tree cards) insufficient inventory data available for mixed-conifer, used 80 as average site index (T.B. 201, Table 4)

2/ Compiled from inventory data. (Variable-radius plots, sum. #2 cards) high, medium and low basal area determined separately for each Forest type.

3/ Acres in each basal area stocking group determined from inventory data. 90-year rotation age, 100-year rotation period for Prescott's technical working group. 110-year rotation age, 120-year rotation period for Walnut Creek's technical working group. 190-year rotation age, 200-year rotation period for administrative working group.

4/ From Table 4, T.B. 630, for ponderosa pine. From Table 4, T.B. 201 for mixed-conifer.

5/ Actual basal area stocking divided by 57% of full basal area stocking.

6/ Table 25, T.B. 630 for ponderosa pine and mixed-conifer. (Per acre of trees 11.6 inches and more in diameter).

7/ Mean annual growth Scribner Bd. Ft. for ponderosa pine multiplied by percent of actual to 57% full stocking factor.

8/ Working group acres multiplied by per acre periodic annual growth.

9/ Table 23, T.B. 630 for ponderosa pine and mixed-conifer (per acre of trees 6.6 inches and more in diameter.)

10/ Mean annual growth international $\frac{1}{4}$" rule for ponderosa pine multiplied by percent of actual to 57% full stocking factor.

11/ Table 21, T.B. 630 for ponderosa pine and mixed-conifer (per acre of trees .6 inches and more in diameter).

12/ Mean annual growth cubic ft. volume for ponderosa pine multiplied by percent of actual to 57% full stocking factor.

TABLE 21

POTENTIAL MEAN ANNUAL GROWTH
PRESCOTT WORKING CIRCLE
PRESCOTT NATIONAL FOREST

Stand Symbol	Forest Type	1/ Average Site Index	2/ Working Group Acres 90 Yr.	110 Yr.	190 Yr.	3/ Per Acre Mean Annual Growth at Full Stocking 90	110	190	Working Circle Potential Mean Annual Growth 90	110	190	4/ Per Acre Mean Annual Growth at Full Stocking 90	110	190	Working Circle Potential Mean Annual Growth 90	110	190	5/ Per Acre Mean Annual Growth at Full Stocking 90	110	190	Working Circle Potential Mean Annual Growth 90	110	190
	Ponderosa Pine					Scribner Bd. Ft.			Scribner Bd. Ft.			International ¼" Bd. Ft.			International ¼" Bd. Ft.			Cubic Ft.			Cubic Ft.		
P1≡C	Cutover Sawtimber	68	3,049	573	859	101	136	163	307,949	77,928	140,017	192	213	212	585,408	122,049	182,108	47	44	33	143,303	25,212	28,347
P1=C	" "	64	6,706	4,667	2,676	81	114	146	543,186	532,038	390,696	161	186	193	1,079,666	868,062	516,468	44	41	31	295,064	191,347	82,956
P1-C	" "	60	16,705	5,458	5,270	61	93	129	1,019,005	507,594	679,830	130	158	174	2,171,650	862,364	916,980	41	38	29	684,905	207,404	152,830
P2≡C	Cutover Poles	68	873	396	308	101	136	163	88,173	53,856	50,204	192	213	212	167,616	84,348	65,296	47	44	33	41,031	17,424	10,164
P2=C	" "	58	1,578	1,023	588	53	83	122	83,634	84,909	71,736	120	147	163	189,360	150,381	95,844	38	37	27	59,964	37,851	15,876
P2-C	" "	56	1,579	1,528	687	45	74	115	71,055	113,072	79,005	110	136	156	173,690	207,808	107,172	37	36	26	58,423	55,008	17,826
P1≡V	Virgin Sawtimber	60		615			93			57,195			158			97,170			38			23,370	
P1=V	" "	53		2,127			59			125,493			120			255,240			34			72,318	
P1-V	" "	52		85			55			4,675			114		390,780	9,690			34			2,890	
N	Nonstocked	60	3,006			61			183,366			130						41			123,246		
			33,496	16,472	10,388	69	95	136	2,296,368	1,556,760	1,411,488	142	161	181	4,758,170	2,657,112	1,883,868	41	38	29	1,406,016	632,824	307,999
				60,356		Weighted Average - 87				5,264,616		Weighted Average - 155				9,299,150		Weighted Average - 38				2,346,839	
	Mixed-Conifer																						
	All	80	557		118	178		217	99,146		25,606	306		278	170,442		32,804	59		40	32,863		4,720
				675		Weighted Average -185				124,752		Weighted Average - 301				203,246		Weighted Average - 56				37,583	
	Working Circle Total			61,031		Weighted Average - 88				5,389,368		Weighted Average - 156				9,502,396		Weighted Average - 39				2,384,422	

1/ Compiled from inventory data. Mixed-conifer site index from T.B. 201, Table 4.
2/ 90 year rotation age, 100 year rotation period for Prescott's technical working group. 110 year rotation age, 120 year rotation period for Walnut Creek's technical working group. 190 year rotation age, 200 year rotation period for Administrative working group.
3/ From Table 25, T.B. 630 for ponderosa pine and mixed-conifer.
4/ From Table 23, T.B. 630 for ponderosa pine and mixed-conifer.
5/ From Table 21, T.B. 630 for ponderosa pine and mixed conifer.

2. Calculation of Allowable Cut

Trees were classified as to "cut" or "leave" when the field inventory was made. The results were as follows:

Product	Working Group	% Understocked	% Cut	Working Group Net Volume	Annual Cut *
Sawtimber	Walnut Creek	53	59	35,267,987 Bd.Ft.	1,040,405 Bd.Ft.
Sawtimber	Administrative	36	57	24,125,659 Bd.Ft.	687,581 Bd.Ft.
Sawtimber	Prescott **	30	57	73,431,823 Bd.Ft.	2,092,807 Bd.Ft.
Utility Poles	Prescott		100	4,232,237 Bd.Ft.	211,612 Bd.Ft.
	Working Circle Total			137,057,706 Bd.Ft.	4,032,405 Bd.Ft.
Utility Poles	Prescott ***		59	170,495 Pieces	5,030 Pieces rounded to 5,000 Pieces
Utility Poles	Prescott ***		67	3,831,475 L.Ft.	128,354 L.Ft.
Utility Poles	Prescott ***		81	1,915,133 Cu.Ft.	77,563 Cu.Ft.

* Working Group Net Volumes multiplied by % cut, divided by 20-year cutting period.

** Includes 48,135 Bd. Ft. of white fir utility poles which are not presently classified as utility pole material.

*** Includes Douglas-fir utility poles and ponderosa pine utility poles on the 557 acres of mixed-conifer type.

Calculated periodic annual growth using site indexes and basal area stocking give the following results:

Working Group	Annual Growth
Walnut Creek	905,239 Bd. Ft.
Administrative	872,404 Bd. Ft.
Prescott	1,306,415 Bd. Ft.
Total Working Circle Net Growth	3,084,058 Bd. Ft.

Comparison of Recommended Cut and Annual Growth Rate

Recommended Annual Cut	4,032,405 Bd. Ft.
Annual Growth Rate	3,084,058 Bd. Ft.
Excessive Recommended Cut	948,347 Bd. Ft.
% Excessive Recommended Cut	31

It is evident from past cutting experience that this working circle can not support an allowable cut of 31% more Bd. Ft. Volume that it can grow, even for a short period. Therefore, it has been decided that the annual growth rate will be used to determine the working circle's annual cut during the period covered by this plan.

Allowable Cut - Prescott Working Circle

Product	Working Group	Scribner Bd. Ft. Volume	Converting Factor Cu. Ft. *	Cu. Ft.
Sawtimber	Walnut Creek	905,239	.230	208,205
Sawtimber	Administrative	872,404	.255	222,463
Sawtimber	Prescott	1,094,803	.257	281,364
Utility Poles**	Prescott	211,612	.375	79,355
	Total Working Circle Annual Cut Net Volume	3,084,058		791,387

* Obtained by dividing Net Average Cu. Ft. Volume Per Acre by Net Average Bd. Ft. Volume Per Acre for respective Working Groups.

** It is estimated that 50% of the present utility poles are less than 11" DBH. This is the reason for the high Cu. Ft. converting factor. The converting factor was obtained from the "cut" and "leave" volumes of the current inventory.

3. Calculation of Area Control

a. Prescott Technical Working Group

Rotation Period	100	years
Cutting Period	20	years
No. Age Classes	5	
Total Operable Acres	34,053	
Average No. Acres to enter each year	1,702	

(1) Regeneration Area Calculation

Acres in Working Group	34,053
No. cutting periods	5
Acres needed each cutting period	6,810
Acres to receive reproduction cuts each year during 20-year cutting period	340
*Acres to be planted this cutting period	3,000
Acres to be planted each year during this cutting period	150
Total acres to receive reproduction cuts each year during this cutting period	190

*Deforested areas to be regenerated

(2) Intermediate Cut Acreage

Total acres cut annually	1,702
Regeneration acres cut annually	340
*Intermediate cut acres annually	1,362

*Does not include area to be reforested

b. Walnut Creek Technical Working Group

Rotation Period	120	years
Cutting Period	20	years
No. Age Classes	6	
Total Operable Acres	16,472	
Average No.of Acres to enter each year	823	

(1) Regeneration Area Calculation

Acres in Working Group	16,472
No. Cutting Periods	6
Acres needed each cutting period	2,745
Acres to receive reproduction cuts each year during 20-year cutting period	137
*Additional acres to be weeded and receive seedbed preparation this cutting period	3,260
Additional acres to be weeded and receive seedbed preparation each year during 20-year cutting period	163

*Understocked stands, weedling, and seedbed preparation

(2) Intermediate Cut Acreage

Total acres cut annually	823
Regeneration acres cut annually	137
Intermediate acres cut annually	686

c. Administrative Working Group

	Prescott Unit	Walnut Creek Unit	
Rotation Period	200	200	
Cutting Period	20	20	
No. of Age Classes	10	10	
Total Operable Acres	7,778	2,728	
Average No. of acres to enter each year	388	136	
Total No. of Acres to enter each year in the Administrative Working Group			524

(1) Regeneration Area Calculation

	Prescott Unit	Walnut Creek Unit	
Acres in Working Group	7,778	2,728	
No. of Cutting Periods	10	10	
Acres needed each cutting period	778	273	
Acres to receive reproduction cuts each year during 20-year cutting period	39	14	
Total No. of Acres to receive reproduction cuts each year during 20-year cutting period in the Administrative Working Group			53

(2) Intermediate Cut Acreage

	Prescott Unit	Walnut Creek Unit	
Total acres cut annually	388	136	
Regeneration acres cut annually	39	14	
	349	122	
Intermediate acres cut annually in the Administrative Working Group			471

4. Calculation of Sawtimber Volume to be Removed by Regeneration and Intermediate Cuts

a. Prescott Technical Working Group

(1) Volume to Cut from Regeneration Areas

		Scribner
Average net volume per acre	2,320	Bd. Ft.
Acres to cut annually	190	
Net Volume to cut from regeneration acreage	440,800	Bd. Ft.
35% of volume retained for seed trees - removal cuts	154,280	Bd. Ft.
Preparatory cut volume	286,520	Bd. Ft.

(2) Volume to Cut from Intermediate Cut Acres

		Scribner
Sawtimber annual allowable cut	1,094,803	Bd. Ft.
Net Volume cut from regeneration acreage	440,800	Bd. Ft
Net Volume to cut from Intermediate cut acreage	654,003	Bd. Ft.

b. Walnut Creek Technical Working Group

(1) Volume to Remove from Regeneration Areas

		Scribner
Average net volume per acre	2,141	Bd. Ft.
Acres to cut annually	137	
Net Volume to cut from regeneration acreage	293,317	Bd. Ft.
35% of volume retained for seed trees - removal cuts	102,661	Bd. Ft.
Preparatory cut volume	190,656	Bd. Ft.

(2) Volume to Cut from Intermediate Cut Acres

		Scribner
Sawtimber annual allowable cut	905,239	Bd. Ft.
Net Volume cut from regeneration acreage	293,317	Bd. Ft.
Net Volume to cut from Intermediate cut acreage	611,922	Bd. Ft.

c. Administrative Working Group

(1) Volume to Cut from Regeneration Areas

	Prescott Unit Scribner	Walnut Creek Unit Scribner
Average net volume per acre	2,320 Bd. Ft.	2,141 Bd. Ft.
Acres to cut annually	39	14
Net volume to cut from regeneration acreage	90,480 Bd. Ft.	29,974 Bd. Ft.
	120,454 Bd. Ft.	
35% of volume retained for seed trees - removal cuts	31,668 Bd. Ft.	10,491 Bd. Ft.
	42,159 Bd. Ft.	
Preparatory cut volume	58,812 Bd. Ft.	19,483 Bd. Ft.
	78,295 Bd. Ft.	

(2) Volume to Cut from Intermediate Cut Acres

	Prescott Unit Scribner	Walnut Creek Unit Scribner
*Sawtimber annual allowable cut	558,338 Bd. Ft.	314,066 Bd. Ft.
	872,404 Bd. Ft.	
Net volume cut from regeneration acreage	90,480 Bd. Ft.	29,974 Bd. Ft.
	120,454 Bd. Ft.	
Net volume to cut from Intermediate cut acreage	467,858 Bd.	284,092 Bd. Ft.
	751,950 Bd. Ft.	

*Averages - adjusted by volume and acres for each Working Group

5. Calculation of Utility Poles to be Removed from Regeneration and Intermediate Cut Acreage - Prescott Technical Working Group

Sawtimber and utility pole cutting is an integrated operation. During a regeneration cut, all stems that will make a utility pole will be cut. Seed trees will be selected from the best sawtimber size trees.

Utility poles range in diameter at breast height from 6.6" to 18". This makes it difficult to correlate Cu. Ft. and Bd. Ft. since stems less than 11" DBH do not have Bd. Ft. volume.

It has been decided that the allowable cut for the next period will be based on the "cut" and "leave" percentages of the current inventory. The size of the sawtimber regeneration area (340 acres) will control the number of utility poles to be removed in regeneration cutting. The balance of the utility poles will be removed through intermediate cuttings. Approximately 59.73% of the poles will be cut on intermediate cutting and 40.27% on regeneration cutting.

a. Utility Pole Allowable Cut From Inventory "Cut" and "Leave"

Working Group Net Volume	% Cut	Allowable Annual Cut
4,232,237 Bd. Ft.	100	211,612 Bd. Ft.
1,915,133 Cu. Ft.	81	77,563 Cu. Ft.
170,495 Pieces	59	5,000 Pieces
3,831,475 Lin. Ft.	67	128,354 Lin. Ft. *

*Average utility pole length = 25 feet.

b. Utility Pole Potential Yield Under Future Management

(1) Stems

It is believed that this Forest can produce 272 stems per acre on a 100-year rotation. The average site index for the pole-producing acreage is 70. See Technical Bulletin No. 630, Table 7, for yield of stems per acre 6.6" and more in diameter.

Gross stems per acre	272	
Exterior defect	40%	
Total	164	stems
Interior defect	10%	
Net stems per acre per rotation	148	
Total pole-producing acres	29,374	
Total stems per rotation	4,347,352	
Rotation period	100	years
Stems available each year	43,474	

(2) Board Foot Volume

The average tree produced on a 100-year rotation will be 14" DBH and contain two 16' logs (to 8" top). By using Region 3 taper tables, each tree will produce 90 Bd. Ft. Technical Bulletin No. 630, Table 12, indicates that 96 stems over 11.6" DBH will be produced per acre.

Gross stems per acre	96	
Bd. Ft. per stem	90	
Gross Bd. Ft. per acre	8,640	
Defect	10%	
Net Bd. Ft. per acre	7,776	
Total pole-producing acres	29,374	
Total Bd. Ft. volume per rotation	228,412,224	
Rotation period	100	years
Bd. Ft. Volume available each year	2,284,122	

(3) Cubic Foot Volume

Cubic foot volumes were taken from Technical Bulletin No. 630, Table 10, for stems 6.6" and more in diameter. Cubic foot volumes include stumps and tips, but not bark.

Gross Volume per acre	4,050	Cu. Ft.
Defect*	15%	
Net Volume per acre	3,442	Cu. Ft.
Total pole-producing acres	29,374	
Total Cu. Ft. per rotation	101,105,308	
Rotation period	100	years
Cu. Ft. available each year	1,011,053	

*Consists of stumps, tops, rot and disease (estimated).

(4) Linear Feet

From data from the current inventory, it is evident that the average utility pole length will be 35 feet for a 100-year rotation (90 year actual age).

Net stems per acre	148	
Average pole length	35	
Net linear ft. per acre	5,180	
Total pole-producing acres	29,374	
Total linear ft. per rotation	152,157,320	
Rotation period		100 years
Linear Ft. available each year	1,521,573	

6. Potential 5-year Pulpwood Cut

The Prescott Working Group is overstocked in the 40-80 year age classes. The production of utility poles, the future major product of the working group, could be increased considerably if the excess volumes in the 5" to 10" diameter classes were removed.

A 5-year cut is included to show the pulpwood potential of the working circle.

a. Prescott Working Group

Total volume in the 5" to 10" diameter class	10,085,877	Cu. Ft.
Inventory % Cut	48	
Total volume available for cutting	4,841,221	Cu. Ft.
Cordwood converting factor	85	
Total cords available for cutting	56,955	
Acres in Working Group with pulpwood	30,488	
Average cords per acre	1.87	
Available cut per year for a 5-year period	11,391	cords

b. Walnut Creek Working Group

Total volume in the 5" to 10" diameter class	1,923,545	Cu. Ft.
Inventory % Cut	40	
Total volume available for cutting	769,418	Cu. Ft.
Cordwood converting factor	85	
Total cords available for cutting	9,052	
Acres in Working Group with pulpwood	16,472	
Average cords per acre	.55	
Available cut per year for a 5-year period	1,810	cords

c. Administrative Working Group

Prescott

Total volume in 5" to 10" diameter class	2,504,090	Cu. Ft.
Inventory % Cut	48	
Total volume available for cutting	1,201,963	Cu. Ft.
Cordwood converting factor	85	
Total cords available for cutting	14,141	
Acres in working group	7,778	
Average cords per acre	1.82	
Available cut per year for a 5-year period	2,828	cords

Walnut Creek

Total volume in the 5" to 10" diameter class	321,905	Cu. Ft.
Inventory % Cut	40	
Total volume available for cutting	128,762	Cu. Ft.
Cordwood converting factor	85	
Total cords available for cutting	1,515	
Acres in Working Group	2,728	
Average cords per acre	.56	
Available cut per year for a 5-year period	303	cords

Available Pulpwood Cut for 5-year Period

Prescott Technical Working Group	56,955	cords
Walnut Creek Technical Working Group	9,052	cords
Administrative Working Group	15,656	cords
	81,663	cords
5-year period	5	
Annual cut per year	16,332	cords

D. Data From Extensive Inventory Converted to A Per Acre Basis for the Timbered Portion of the Prescott Working Circle

1. Age Class Distribution *

	ACRES							
	Site 1		Site 2		Site 3		Total	
Age	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
1-20								
21-40								
41-60	2,253	3,590	10,703	17,052	4,505	7,179	17,461	27,821
61-80	3,380	5,385	19,159	30,522	9,573	15,254	32,112	51,161
81-100	564	899	2,816	4,488	1,691	2,693	5,071	8,080
101-120			564	899	562	896	1,126	1,795
121+			564	899	1,691	2,693	2,225	3,592
Total							58,025	92,449

* The average age class of the entire stand that is to be featured in management.

2. Stocking *

	ACRES							
	Site 1		Site 2		Site 3		Total	
Stocked	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
Yes	4,676	7,450	21,578	34,379	7,715	12,293	33,969	54,122
No	1,521	2,424	12,228	19,481	10,307	16,422	24,056	38,327
Total							58,025	92,449

* The following rule of thumb was used to determine adequate stocking:

Radius	Size Class
3'	Seedlings 0 - 4.49' tall
6'	Saplings 4.50' tall to 4.99" d.b.h.
9'	Small Poles 5.0" to 7.9" d.b.h.
13'	Large Poles 8.0" to 10.9" d.b.h.
18'	Sawtimber 11.0" to 19.9" d.b.h.
26'	Sawtimber 20.0" to 29.9" d.b.h.
34'	Sawtimber 30.0" and over d.b.h.

If one good leave tree of any of the above size classes was found within the appropriate radius from the plot center, the area was considered stocked.

3. Actual Basal Area Compared to Optimum Expressed as a Percentage of Optimum *

ACRES

%	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
171+	620	988	3,097	4,934	845	1,347	4,562	7,269
0-20	1,183	1,885	10,649	16,966	8,335	13,280	20,167	32,131
21-50	1,014	1,615	9,013	14,359	4,561	7,268	14,588	23,242
51-90	1,577	2,513	6,028	9,603	2,253	3,589	9,858	15,075
91-130	1,070	1,705	3,269	5,208	1,408	2,243	5,747	9,156
131-170	733	1,168	1,750	2,790	620	988	3,103	4,946
Total							58,025	92,449

* 57% of Table 4, T.B. 630, for ponderosa pine for optimum stocking

4. Seed Source *

Seed Source	ACRES							
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
Yes	6,197	9,874	33,072	52,691	17,007	27,098	56,276	89,663
No			734	1,169	1,015	1,617	1,749	2,786
Total							58,025	92,449

* The seed dispersing distance was considered to be 1½ times the height of the seed bearing tree on or adjacent to the 1/4-acre plot.

5. Treatment

Treatment	ACRES							
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
None Needed	4,958	7,899	29,634	47,212	15,488	24,678	50,080	79,791
Noncommercial thinning	507	808	2,424	3,861	1,071	1,706	4,002	6,375
Dwarfmistletoe in reproduction	732	1,167	1,748	2,785	1,463	2,331	3,943	6,283
Poor quality reproduction	0	0	0	0	0	0	0	0
Total							58,025	92,449

6. Number of Commercial Seedlings Per Acre *

No. of Seedlings	ACRES							
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
0	5,013	7,989	29,073	46,320	15,995	25,485	50,081	79,794
1-250	620	987	2,931	4,670	1,351	2,154	4,902	7,811
251-500	338	538	1,014	1,615	225	359	1,577	2,512
501-750	0	0	280	447	225	359	505	806
751-1000	113	180	112	178	57	88	282	446
1001+	113	180	396	630	169	270	678	1,080
Total							58,025	92,449

* Seedlings were counted in a 7.45' radius circle and projected to a per acre basis.

7. Plant And/Or Seed *

Plant And/or Seed	ACRES							
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
None Needed	6,197	9,874	31,156	49,637	17,459	27,816	54,812	87,327
Hand Plant	0	0	1,579	2,516	507	807	2,086	3,323
Machine Plant	0	0	564	899	0	0	564	899
Hand Broad-Cast	0	0	507	808	56	92	563	900
Total							58,025	92,449

* Site, operability, economics, and erosion control were the factors used in conjunction with present stocking to determine the need for planting and/or seeding.

8. Site Preparation *

Site Preparation	ACRES							
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
None								
Needed	6,197	9,874	32,116	51,167	17,683	28,175	55,996	89,216
Hand	0	0	903	1,438	0	0	903	1,438
Machine	0	0	787	1,255	339	540	1,126	1,795
Total							58,025	92,449

* Competing species above the seedling stage not considered in this table.

9. Competition *

Competition	ACRES							
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
None	2,253	3,590	10,084	16,066	4,506	7,179	16,843	26,835
Oak	226	359	3,719	5,925	2,197	3,500	6,142	9,784
Grass	451	718	2,874	4,578	2,253	3,589	5,578	8,885
Brush	507	808	2,704	4,309	5,181	8,256	8,392	13,373
Rodents			281	447			281	447
Livestock								
Wildlife								
Aspen								
Pinyon-Juniper			57	92	169	270	226	362
Duff	2,760	4,399	14,087	22,443	3,716	5,921	20,563	32,763
Total							58,025	92,449

* Competing with reproduction

10. Competing Species Less Than 4.5' in Height

Specie	Stems Per Acre	ACRES Site 1 Operable	Site 1 Total Commercial	Site 2 Operable	Site 2 Total Commercial	Site 3 Operable	Site 3 Total Commercial	Total Operable	Total Total Commercial
None		1,186	1,890	8,452	13,465	3,136	5,028	12,794	20,563
Oak	0-500	844	1,346	5,521	8,795	2,422	3,859	8,787	14,000
	501-1000	168	269	4,059	6,463	1,633	2,602	5,858	9,334
	1001+	1,070	1,705	4,395	7,002	2,984	4,755	8,449	13,462
Total		2,082	3,320	13,975	22,260	7,039	11,216	23,094	33,796
Pinyon and Juniper	0-500	112	178	788	1,255	168	267	1,068	1,700
	501-1000	0	0	226	361	0	0	226	361
	1001+	0	0	64	102	0	0	64	102
Total		112	178	1,078	1,718	168	267	1,358	2,163
Hardwoods and Others	0-500	789	1,256	4,111	6,549	2,364	3,767	7,264	11,572
	501-1000	451	718	1,744	2,779	1,463	2,332	3,658	5,829
	1001+	1,577	2,512	4,448	7,089	3,832	6,105	9,857	15,706
Total		2,817	4,486	10,303	16,417	7,659	12,204	20,779	33,017
TOTAL								58,025	92,449

11. Competing Species More Than 4.5' In Height

Stems Per Acre	ACRES					
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
None			3,381	5,386	1,127	1,795	4,508	7,181
1-50	3,380	5,385	10,705	17,057	3,942	6,280	18,027	28,650
51-150	1,127	1,795	6,197	9,873	5,070	8,078	12,394	19,726
151-250	1,127	1,795	6,197	9,873	1,690	2,693	9,014	14,361
251-350	563	899	1,690	2,693	1,690	2,693	3,943	6,285
351-450			1,126	1,794	2,813	4,483	3,939	6,277
451-550			2,255	3,592			2,255	3,592
551+			2,255	3,592	1,690	2,693	3,945	6,285
Total							58,025	92,449

12. Topography

Topography	ACRES					
	Site 1		Site 2		Site 3		Total	
	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
Canyon Bottom	1,296	2,065	734	1,169			2,030	3,234
Valley Bottom	282	449	960	1,530	58	92	1,300	2,071
Lower 1/3 Slope	2,028	3,232	7,153	11,396	2,253	3,589	11,434	18,217
Middle 1/3 Slope	1,521	2,423	9,354	14,904	4,561	7,268	15,436	24,595
Upper 1/3 Slope	394	628	7,153	11,396	5,181	8,256	12,728	20,280
Flatwoods	620	988	6,761	10,772	3,323	5,295	10,704	17,055
Ridgetop	56	89	1,522	2,424	2,646	4,215	4,224	6,728
Saddle								
Other			169	269			169	269
Total							58,025	92,449

13. Percent of Slope

	ACRES							
	Site 1		Site 2		Site 3		Total	
%	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
0	563	898	4,395	7,002	2,759	4,396	7,717	12,296
10	2,592	4,129	7,718	12,296	4,843	7,716	15,153	24,141
20	620	987	6,930	11,041	3,774	6,013	11,324	18,041
30	1,521	2,423	6,423	10,233	2,647	4,218	10,591	16,874
40	338	539	2,874	4,578	1,746	2,782	4,958	7,899
50	563	898	3,042	4,847	620	988	4,225	6,733
60	0	0	1,633	2,602	901	1,436	2,534	4,038
70	0	0	338	539	112	178	450	717
80	0	0	395	630	620	988	1,015	1,618
90	0	0	58	92	0	0	58	92
Total							58,025	92,449

14. Aspect

	ACRES							
	Site 1		Site 2		Site 3		Total	
Aspect	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
North	1,070	1,705	6,028	9,603	4,167	6,639	11,265	17,947
NE	902	1,437	3,154	5,025	2,929	4,666	6,985	11,128
East	281	448	4,395	7,002	562	896	5,238	8,346
SE	1,577	2,513	5,466	8,709	1,577	2,513	8,620	13,735
South	338	538	1,859	2,962	1,070	1,706	3,267	5,206
SW	226	359	2,086	3,323	620	988	2,932	4,670
West	789	1,258	3,269	5,208	3,267	5,206	7,325	11,672
NW	394	628	3,830	6,102	1,802	2,871	6,026	9,601
Flat	620	988	3,719	5,926	2,028	3,230	6,367	10,143
Total							58,025	92,449

15. Percent Ground Cover *

	ACRES							
	Site 1		Site 2		Site 3		Total	
%	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
0			507	808	56	89	563	897
10			564	900	281	448	845	1,348
20	56	90	676	1,077	281	448	1,013	1,615
30			619	986	395	629	1,014	1,615
40	169	270	1,183	1,885	1,070	1,706	2,422	3,861
50	620	987	2,028	3,232	1,972	3,141	4,620	7,360
60	507	808	2,593	4,130	2,309	3,678	5,409	8,616
70	394	628	3,719	5,925	2,027	3,230	6,140	9,783
80	1,070	1,705	5,747	9,156	2,478	3,948	9,295	14,809
90	3,381	5,386	16,170	25,761	7,153	11,398	26,704	42,545
Total							58,025	92,449

* Ocular estimate of the percent of ground cover within a circle of 7.45' radius. Vegetation, rock, and duff were considered ground cover.

16. Rock

	ACRES							
	Site 1		Site 2		Site 3		Total	
Rock	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
Rock Free 1/	1,409	2,244	4,057	6,463	1,015	1,617	6,481	10,324
Bedrock 2/	56	90	1,293	2,063	1,296	2,065	2,645	4,218
3" Diameter 2/	1,239	1,975	5,240	8,348	1,689	2,691	8,168	13,014
3-10" Diameter 2/	1,409	2,244	13,074	20,828	7,209	11,485	21,692	34,537
10"+ Diameter 3/	2,028	3,231	9,520	15,167	6,476	10,320	18,024	28,718
Hard Ground	56	90	622	991	337	537	1,015	1,618
Total							58,025	92,449

1/ Bedrock and surface rock obstacle to skidding and/or road building.

2/ Surface rock that does not present a problem to skidding and/or road building.

3/ Hard ground that will interfere with reproduction.

17. Soil *

	ACRES							
	Site 1		Site 2		Site 3		Total	
Soil	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
Sand	2,929	4,667	19,212	30,609	9,236	14,716	31,377	49,992
Gravel	732	1,167	2,424	3,861	1,802	2,872	4,958	7,900
Loam	1,973	3,142	11,944	19,029	6,928	11,038	20,845	33,209
Clay	563	898	226	361	56	89	845	1,348
Total							58,025	92,449

* Soil surface to 2" depth

18. Visible Erosion

	ACRES							
	Site 1		Site 2		Site 3		Total	
Erosion	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial	Operable	Total Commercial
None	2,197	3,500	9,689	15,436	5,632	8,973	17,518	27,909
Gullies	56	90	1,075	1,713	506	807	1,637	2,610
Rills	451	718	2,704	4,309	620	988	3,775	6,015
Surface Movement	3,493	5,566	20,338	32,402	11,264	17,947	35,095	55,915
Total							58,025	92,449

E. TIMBER DATA

1. Prescott Technical Working Group

TABLE 22

Gross Volume and Stems Per Acre for Ponderosa Pine Saplings and Pole Timber by Site and Age Classes in the Prescott Working Group.

Site and Age Class	Acres	Saplings 0-4" DBH	Poletimber					
			5-7" DBH		8-10" DBH		Total	Total
		Stems	Stems	Cu. Ft.	Stems	Cu.Ft.	Stems	Cu. Ft.
Site - 1								
41-60	835	133	160	486	48	405	208	891
61-80	1,253	47	71	125	23	152	94	277
Total	2,088							
Site - 2								
41-60	6,264	89	60	142	35	219	95	361
61-80	12,111	75	45	105	36	236	81	341
81-100	1,670	39	35	68	26	152	61	220
101-120	420							
Total	20,465							
Site - 3								
41-60	2,507	88	58	98	40	199	98	297
61-80	5,430	64	48	117	28	132	76	249
Total	7,937							
Nonstocked	3,006							
Total Operable	33,496							
*Inoperable	22,761	74	53	122	33	204	86	326
Total Commercial	56,257							

* Weighted working group averages.

TABLE 23

Stems Per Acre for Ponderosa Pine Sawtimber
By Site and Age Classes in the
Prescott Working Group

Site and Age Class	Acres	Sawtimber 11"+ DBH			11"+ DBH
		YP Stems	BJ Stems	Total Stems	Snags Stems
Site - 1					
41-60	835	3.55	22.56	26.11	2.40
61-80	1,253	4.03	32.00	36.03	1.73
Total	2,088				
Site - 2					
41-60	6,264	4.29	29.17	33.46	.38
61-80	12,111	3.44	29.95	33.39	.71
81-100	1,670	5.23	19.53	24.76	
101-120	420	2.20	4.90	7.10	3.20
Total	20,465				
Site - 3					
41-60	2,507	4.17	16.70	20.87	1.18
61-80	5,430	1.92	10.62	12.54	.37
Total	7,937				
Nonstocked	3,006				
Total Operable	33,496				
*Inoperable	22,761	3.50	24.23	27.73	.70
Total Commercial	56,257				

* Weighted Working Group Averages.

TABLE 24

Gross Volume Per Acre for Ponderosa Pine Sawtimber
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Sawtimber 11+ DBH					
		YP		BJ		Total	Total
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.
Site - 1							
41-60	835	2,242	375	1,704	444	3,946	819
61-80	1,253	3,034	507	2,621	621	5,655	1,128
Total	2,088						
Site - 2							
41-60	6,264	1,740	317	1,215	338	2.955	655
61-80	12,111	1,301	243	2,075	752	3,376	995
81-100	1,670	2,113	367	1,888	470	4,001	837
101-120	420	462	103	148	51	610	154
Total	20,465						
Site - 3							
41-60	2,507	709	154	736	224	1,445	378
61-80	5,430	374	80	530	152	904	332
Total	7,937						
Nonstocked	3,006						
Total Operable	33,496						
*Inoperable	22,761	1,307	241	1,489	478	2,796	719
Total Commercial	56,257						

* Weighted working group averages.

TABLE 25

Gross Volume and Stems Per Acre for Ponderosa Pine Utility Poles
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Pole Length Class	Pieces	Linear Ft.	Scribner Bd. Ft.	Cu. Ft.
		16	3.05	49		30
Site - 1		20	15.10	202		87
		25	2.70	68	113	34
41-60		30	2.55	77	158	44
		40	1.55	62	205	50
Total	835		24.95	458	476	245
		20	2.87	54	21	19
		22	2.83	62	41	26
Site - 2		25	1.05	26	27	13
		30	.27	8	20	5
41-60		35	.97	34	71	19
		40	.22	9	22	6
		50	.17	9	34	7
Total	6,264		8.38	202	236	95
		16	.40	6		2
		18	1.49	27		8
Site - 2		20	2.25	45	8	20
		22	1.70	37	37	18
61-80		25	.82	21	62	18
		30	.72	22	59	16
		35	.13	5	15	4
		40	.23	9	27	7
		50	.09	5	18	4
Total	12,111		7.38	177	226	97
		18	4.75	86		31
Site - 2		20	4.20	84		32
		22	9.27	204	145	74
81-100		25	1.03	26	68	19
		40	.78	35	110	27
Total	1,670		20.03	435	323	183
Site - 3		18	1.05	19		8
		20	4.82	96	44	42
41-60		25	1.33	33		12
		30	2.13	64	70	21
Total	2,507		9.33	212	114	83
Site - 3						
61-80		20	.28	6	22	6
Total	5,430		.28	6	22	6
Total Operable	28,817					
Non Pole Producing	6,045					
*Inoperable	21,395		7.25	167	182	83
Total Commercial	56,257					

* Weighted working group averages.

TABLE 26

Gross Volume for Ponderosa Pine and Mixed-Conifer Poletimber
By Site and Age Class in the Prescott Working Group

Site and Age Class	Ponderosa Pine Acres	Mixed-Conifer Acres	Total Acres	Poletimber 5-7" dbh Cu. Ft.	Poletimber 8-10" dbh Cu. Ft.	Poletimber Total Cu. Ft.
Site 1						
41-60	835		835	405,810	338,175	743,985
61-80	1,253	139	1,392	185,398	190,456	375,854
101-120		139	139	20,572	38,102	78,674
Total	2,088	278	2,366	611,780	586,733	1,198,513
Site 2						
41-60	6,264		6,264	889,488	1,371,816	2,261,304
61-80	12,111		12,111	1,271,655	2,858,196	4,129,851
81-100	1,670	140	1,810	113,560	260,980	374,540
101-120	420		420			
Total	20,465	140	20,605	2,274,703	4,490,992	6,765,695
Site 3						
41-60	2,507	139	2,646	256,111	513,488	769,599
61-80	5,430		5,430	635,310	716,760	1,352,070
Total	7,937	139	9,076	891,421	1,230,248	2,121,669
Nonstocked	3,006		3,006			
Total Operable	33,496	557	34,053	3,777,904	6,307,973	10,085,877
Inoperable 1/	22,761	2,154	24,915	3,007,320	4,946,958	7,954,278
Total Commercial	56,257	2,711	58,968	6,785,224	11,254,931	18,040,155

1/ Weighted Working Group averages used to compute gross volume - Ponderosa pine and Mixed-Conifer.

TABLE 27

Gross Volume for Ponderosa Pine Sawtimber
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Sawtimber 11" + D.B.H. YP Scribner Bd. Ft.	YP Cu. Ft.	BJ Scribner Bd. Ft.	BJ Cu. Ft.	Total Scribner Bd. Ft.	Total Cu. Ft.
Site 1							
41-60	835	1,872,070	313,125	1,422,840	370,740	3,294,910	683,865
61-80	1,253	3,801,602	635,271	3,284,113	778,113	7,085,715	1,413,384
Total	2,088	5,673,672	948,396	4,706,953	1,148,853	10,380,625	2,097,249
Site 2							
41-60	6,264	10,899,360	1,985,688	7,610,760	2,117,232	18,510,120	4,102,920
61-80	12,111	15,756,411	2,942,973	25,130,325	9,107,472	40,886,736	12,050,445
81-100	1,670	3,528,710	612,890	3,152,960	784,900	6,681,670	1,397,790
101-120	420	194,040	43,260	62,160	2,142	256,200	45,402
Total	20,465	30,378,521	5,584,811	35,956,205	12,011,746	66,334,726	17,596,557
Site 3							
41-60	2,507	1,777,463	386,078	1,845,152	561,568	3,622,615	947,646
61-80	5,430	2,030,820	434,400	2,877,700	825,360	4,908,720	1,259,760
Total	7,937	3,808,283	820,478	4,723,052	1,386,928	8,531,335	2,207,406
Nonstocked	3,006						
Tot.Operable	33,496	39,860,476	7,353,685	45,386,210	14,547,527	85,246,686	21,901,212
*Inoperable	22,761	29,748,627	5,485,401	33,891,129	10,879,758	63,639,756	16,365,159
Total Commercial	56,257	69,609,103	12,839,086	79,277,339	25,427,285	148,886,442	38,266,371

* Weighted Working Group Averages used to compute gross volume.

TABLE 28

Gross Volume and Stems for Ponderosa Pine Utility Poles
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Pole Length Class	Pieces	Linear Ft.	Scribner Bd. Ft.	Cu. Ft.
		16	2,547	40,915		25,050
		20	12,608	168,670		72,645
Site 1		25	2,254	56,780	94,355	28,390
41-60		30	2,129	64,295	131,930	36,740
		40	1,294	51,770	171,175	41,750
Total	835		20,832	382,430	397,460	204,575
		20	17,978	338,256	131,544	119,016
		22	17,727	388,368	256,824	162,864
Site 2		25	6,577	162,864	169,128	81,432
41-60		30	1,691	50,112	125,280	31,320
		35	6,076	212,976	444,744	119,016
		40	1,378	56,376	137,808	37,584
		50	1,065	56,376	212,976	43,848
Total	6,264		52,492	1,265,328	1,478,304	595,080
		16	4,844	72,666		24,222
		18	18,045	326,997		96,888
		20	27,250	544,995	96,888	242,220
Site 2		22	20,589	448,107	448,107	217,998
61-80		25	9,931	254,331	950,882	217,998
		30	8,720	266,442	714,549	193,776
		35	1,574	60,555	181,665	48,444
		40	2,786	108,999	326,997	84,777
		50	1,090	60,555	217,998	48,444
Total	12,111		94,829	2,143,647	2,737,086	1,174,767
		18	7,932	143,620		51,770
Site 2		20	7,014	140,280		53,440
81-100		22	15,480	340,680	242,150	123,580
		25	1,720	43,420	113,560	31,730
		40	1,303	58,450	183,700	45,090
Total	1,670		33,449	726,450	539,410	305,610
		18	2,632	47,633		20,056
Site 3		20	12,084	240,672	110,308	105,294
41-60		25	3,334	82,731		30,084
		30	5,340	160,448	175,490	52,647
Total	2,507		23,390	531,484	285,798	208,081
Site 3						
61-80		20	1,520	32,580	119,460	32,580
Total	5,430		1,520	32,580	119,460	32,580
Total Operable	28,817		226,512	5,309,921	5,557,509	2,520,693
Non Pole-Producing	6,045					
*Inoperable	21,395		155,114	3,572,965	3,893,890	1,775,785
Total Commercial	56,257		381,626	8,882,886	9,451,399	4,296,478

* Weighted Working Group Averages used to compute gross stems and volume.

TABLE 29

Net Volume for Ponderosa Pine Sawtimber by Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Sawtimber 11" + D.B.H. YP Scribner Bd. Ft.	YP Cu. Ft.	BJ Scribner Bd. Ft.	BJ Cu. Ft.	Total Scribner Bd. Ft.	Total Cu. Ft.
Site 1							
41-60	835	1,404,052	234,844	1,280,556	333,666	2,684,608	568,510
61-80	1,253	2,851,202	476,453	2.955,702	700,302	5,806,904	1,176,755
Total	2,088	4,255,254	711,297	4,236,257	1,033,968	8,491,512	1,745,265
Site 2							
41-60	6,264	8,174,520	1,489,266	6,849,684	1,905,509	15,024,204	3,394,775
61-80	12,111	11,817,308	2,207,230	22,617,292	8,196,725	34,434,600	10,403,955
81-100	1,670	2,646,532	459,668	2,837,664	706,410	5,484,196	1,166,078
101-120	420	145,530	32,445	55,944	1,928	201,474	34,373
Total	20,465	22,783,890	4,188,609	32,360,584	10,810,572	55,144,474	14,999,181
Site 3							
41-60	2,507	1,333,097	289,558	1,660,637	505,411	2,993,734	794,969
61-80	5,430	1,523,115	325,800	2,590,110	742,824	4,113,225	1,068,624
Total	7,937	2,856,212	615,358	4,250,747	1,248,235	7,106,959	1,863,593
Nonstocked	3,006						
Tot.Operable	33,496	29,895,357	5,515,264	40,847,589	13,092,774	70,742,946	18,608,038
*Inoperable	22,761	20,229,066	3,730,072	28,807,460	9,247,794	49,036,526	12,977,866
Total Commercial	56,257	50,124,423	9,245,336	69,655,049	22,340,568	119,779,472	31,585,904

* Weighted Working Group Averages used to compute net volume.

TABLE 30

Net Volume and Stems for Ponderosa Pine Utility Poles
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Pole Length Class	Pieces	Linear Ft.	Scribner Bd. Ft.	Cu. Ft.
		16	1,859	29,868		18,286
Site 1		20	9,204	123,129		33,031
41-60		25	1,645	41,449	68,879	20,725
		30	1,554	46,935	96,309	26,820
		40	945	37,792	124,958	30,478
Total	835		15,207	279,173	290,146	149,340
		20	13,124	246,927	96,027	86,882
		22	12,941	283,509	187,482	118,891
Site 2		25	4,801	118,891	123,463	59,445
		30	1,234	36,582	91,454	22,864
41-60		35	4,435	155,472	324,663	86,881
		40	992	41,154	100,600	27,436
		50	777	41,154	155,472	32,009
Total	6,264		38,319	923,689	1,079,161	434,408
		16	3,536	53,046		17,682
		18	13,173	238,708		70,728
		20	19,892	397,846	70,728	176,820
		22	15,030	327,118	327,118	159,139
		25	7,250	185,662	548,144	159,139
Site 2		30	6,366	194,503	521,621	141,456
61-80		35	1,149	44,205	132,615	35,364
		40	2,034	79,569	238,708	61,887
		50	796	44,205	159,138	35,364
Total	12,111		69,225	1,564,862	1,998,073	857,580
		18	5,790	104,843		37,792
Site 2		20	5,120	102,404		39,011
81-100		22	11,300	248,696	176,770	90,213
		25	1,256	31,697	82,899	23,163
		40	951	42,668	134,101	32,916
Total	1,670		24,418	530,308	393,769	223,095
		18	1,921	34,772		14,641
Site 3		20	8,821	175,690	80,525	76,865
41-60		25	2,434	60,394		21,961
		30	3,898	117,127	128,108	48,432
Total	2,507		17,075	387,983	208,633	151,899
Site 3						
61-80		20	1,110	23,783	87,206	23,783
Total	5,430		1,110	23,783	87,206	23,783
Total						
Operable	28,817		165,354	3,709,798	4,056,988	1,840,105
Non Pole-						
Producing	6,045					
*Inoperable	21,395		113,233	2,608,264	2,842,540	1,296,323
Total Com-						
mercial	56,257		278,587	6,318,062	6,899,528	3,136,428

* Weighted Working Group Averages used to compute net volumes and stems.

TABLE 31

Gross Volume and Stems Per Acre for Mixed-Conifer Saplings and Poletimber
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Saplings									Poletimber											
		0-4" DBH			5-7" DBH						8-10" DBH						Total Stems			Total Cu. Ft.		
					Stems			Cu.Ft.			Stems			Cu. Ft.								
		PP	WF	DF	PP	WF	DF	PP	WF	DF	PP	WF	DF	PP	WF	DF	PP	WF	DF	PP	WF	DF
Site - 1																						
61-80	139			48	15	54		54	153								15	54		54	153	
101-120	139	76				7	20		75	73			38			418		7	58		75	491
Total	278																					
Site - 2																						
81-100	140												6			51			6			51
Site - 3																						
41-60	139	423			68	28		54	21		25			105			93	28		159	21	
Total Operable	557																					
*Inoperable	2,154	112		12	21	22	5	27	62	18	6		11	26		115	27	22	14	53	62	136
Total Commercial	2,711																					

* Weighted working group averages.

TABLE 32

Gross Volume and Stems Per Acre for Mixed-Conifer Sawtimber
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	Ponderosa Pine									Douglas Fir			White Fir			Total DF and WF			Total Mixed-Conifer			
		YP			BJ			Total															
		Stems	Scrib. Bd.Ft.	Cu.Ft.	Stems	Scrib. Bd.Ft.	Cu.Ft.	Stems	Scrib. Bd.Ft.	Cu.Ft.	Stems	Scrib. Bd.Ft.	Cu.Ft.	Stems	Scrib. Bd.Ft.	Cu.Ft.	Stems	Scrib. Bd.Ft.	Cu.Ft.	Stems	Scrib. Bd.Ft.	Cu.Ft.	Snags Stems
Site - 1																							
61-80	139	1.10	827	137	41.70	4,886	1,174	42.80	5,713	1,311				6.00	2,745	748	6.00	2,745	748	48.80	8,458	2,059	
101-120	139				10.80	991	254	10.80	991	254	29.90	3,250	798	36.90	7,640	1,682	66.80	10,890	2,480	77.60	11,881	2,734	
Total	278																						
Site - 2																							
81-100	140										11.30	1,559	401				11.30	1,559	401	11.30	1,559	401	1.00
Site - 3																							
41-60	139	12.80	1,127	299	40.90	1,829	563	53.70	2,956	862				2.80	359	95	2.80	359	95	56.50	3,315	957	
Total Operable	557																						
*Inoperable	2,154	3.48	489	109	23.35	1,927	498	26.83	2,416	607	10.30	1,202	300	11.43	2,686	631	21.73	3,888	931	48.56	6,304	1,538	.25
Total Commercial	2,711																						

*Weighted working group averages.

TABLE 33

Gross Volume and Stems Per Acre for Mixed-Conifer Utility Poles
in the Prescott Working Group

	Acres	Pole Length Class	Ponderosa Pine				Douglas-Fir				White Fir*				Total Mixed-Conifer			
			Stems	Linear Ft.	Scrib. Bd.Ft.	Cu.Ft.	Stems	Linear Ft.	Scrib. Bd.Ft.	Cu.Ft.	Stems	Linear Ft.	Scrib. Bd. Ft.	Cu. Ft.	Stems	Linear Ft.	Scrib. Bd. Ft.	Cu. Ft.
		20	4.08	82		15	1.85	36		9					5.63	118		24
		22	3.05	67	70	51	1.42	31		27					4.47	98	70	78
		25	1.18	29	111	29									1.18	29	111	29
		30									1.00	30	133	24	1.00	30	133	24
		45	.55	25	138	29									.55	25	138	29
		50	.65	32	112	26									.65	32	112	26
Total Operable	557		9.96	235	431	150	2.27	67		36	1.00	30	133	24	13.48	332	564	210
**Inoperable	2,154		9.96	235	431	150	2.27	67		36	1.00	30	133	24	13.48	332	564	210
Total Commercial	2,711																	

* Not considered as utility pole material.

** Weighted working group averages.

TABLE 34

Gross Volume for Mixed-Conifer Sawtimber
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	PONDEROSA PINE						DOUGLAS FIR		WHITE FIR		TOTAL DF AND WF		TOTAL MIXED-CONIFER	
		Y. P.		B. J.		Total									
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.
Site 1															
61-80	139	114,669	19,043	679,154	163,186	793,823	182,229			381,555	103,972	381,555	103,972	1,175,378	286,281
101-120	139			137,749	35,306	137,749	35,306	451,750	110,922	1,061,960	233,798	1,513,710	344,720	1,651,459	380,026
Total	278	114,669	19,043	816,903	198,486	931,572	217,535	451,750	110,922	1,443,515	337,770	1,895,265	448,692	2,826,837	666,227
Site 2															
81-100	140							218,260	56,140			218,260	56,140	218,260	56,140
Site 3															
41-60	139	156,653	41,561	254,231	78,257	410,884	119,818			49,901	13,205	49,901	13,205	460,785	133,023
Total Operable	557	271,322	60,604	1,071,134	276,743	1,342,456	337,353	670,010	167,062	1,493,416	350,975	2,163,426	518,037	3,505,882	855,390
1/ Inoperable	2,154	1,053,306	234,786	4,150,758	1,072,692	5,204,064	1,307,478	2,589,108	646,200	5,785,644	1,359,174	8,374,752	2,005,374	13,578,816	3,312,852
Total Commercial	2,711	1,324,628	295,390	5,221,892	1,349,435	6,546,520	1,644,831	3,259,118	813,262	7,279,060	1,710,149	10,538,178	2,523,411	17,084,698	4,167,242

1/ Weighted Working Group Averages used to compute Gross Volumes.

TABLE 35

Gross Volume for Mixed-Conifer Utility Poles
in the Prescott Working Group

			PONDEROSA PINE				DOUGLAS-FIR				WHITE FIR 1/				TOTAL MIXED-CONIFER			
	Acres	Pole Length Class	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.	Stems	Linear Feet	Scribner Cu. Ft.	Cu. Ft.
		20	2,273	45,674		8,355	1,030	20,052		5,013					3,303	65,726		13,368
		22	1,699	37,319	38,990	28,407	791	17,267		15,039					2,490	54,586	38,990	43,446
		25	657	16,153	61,827	16,153									657	16,153	61,827	16,153
		30									557	16,710	74,081	13,368	557	16,710	74,081	13,368
		45	306	13,925	76,866	16,153									306	13,925	76,866	16,153
		50	362	17,824	62,384	14,482									362	17,824	62,384	14,482
Total Operable	557		5,297	130,895	240,067	83,550	1,821	37,319		20,052	557	16,710	74,081	13,368	7,675	184,924	314,112	116,970
Inoperable 2/	2,154		21,454	506,190	928,374	323,100	4,890	144,318		77,544	2,154	64,620	286,482	51,696	28,498	715,128	1,214,856	452,340
Total Commercial	2,711		26,751	637,085	1,168,441	406,650	6,711	181,637		97,596	2,711	81,330	360,563	65,064	36,173	900,052	1,528,968	569,310

1/ Not considered as Utility Pole material.

2/ Weighted Working Group Averages used to compute Gross Volumes and Stems.

TABLE 36

Net Volume for Mixed-Conifer Sawtimber
By Site and Age Classes in the Prescott Working Group

Site and Age Class	Acres	PONDEROSA PINE						DOUGLAS-FIR		WHITE FIR		TOTAL DF AND WF		TOTAL MIXED-CONIFER	
		Y. P.		B. J.		Total									
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.
Site 1															
61-80	139	86,002	14,282	611,239	146,867	697,241	161,149			248,012	67,582	248,012	67,582	945,253	228,731
101-120	139			123,974	31,775	123,974	31,775	338,812	83,192	690,274	151,969	1,029,086	235,161	1,153,060	266,936
Total	278	86,002	14,282	735,213	178,642	821,215	192,924	338,812	83,192	938,286	219,551	1,277,098	302,743	2,098,313	495,667
Site 2															
81-100	140							163,695	42,105			163,695	42,105	163,695	42,105
Site 3															
41-60	139	117,489	31,170	228,808	70,431	346,297	101,601			32,436	858	32,436	858	378,733	102,459
Total Operable	557	203,491	45,452	964,021	249,073	1,167,512	294,525	502,508	125,297	970,722	220,409	1,473,230	345,706	2,640,741	640,231
1/ Inoperable	2,154	716,248	165,774	3,569,652	911,788	4,285,900	1,077,562	1,812,376	452,340	3,471,386	815,504	5,283,762	1,267,844	9,569,662	2,345,406
Total Commercial	2,711	919,739	210,226	4,533,673	1,160,861	5,453,412	1,372,087	2,314,884	577,637	4,442,108	1,035,913	6,756,992	2,613,550	12,210,404	2,985,637

1/ Weighted Working Group Averages used to compute Net Volume.

TABLE 37

Net Volume for Mixed-Conifer Utility Poles
in the Prescott Working Group

			PONDEROSA PINE				DOUGLAS-FIR				WHITE FIR 1/				TOTAL MIXED-CONIFER			
	Acres	Pole Length Class	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.	Stems	Linear Feet	Scribner Bd. Ft.	Cu. Ft.
		20	1,659	33,342		6,099	721	14,036		3,509					2,380	47,378		9,608
		22	1,240	27,243	28,463	20,737	554	12,087		10,527					1,794	39,330	28,463	31,264
		25	480	11,792	45,134	11,792									480	11,792	45,134	11,792
		30									362	10,862	48,135	8,689	362	10,862	48,135	8,689
		45	223	10,165	56,112	11,792									223	10,165	56,112	11,792
		50	264	13,012	45,540	10,572									264	13,012	45,540	10,572
Total Operable	557		3,866	95,554	175,249	60,992	1,275	26,123		14,036	362	10,862	48,135	8,689	5,503	132,539	223,384	83,717
Inoperable 2/	2,154		15,661	369,519	677,713	235,863	3,423	101,023		54,231	1,400	42,003	186,213	33,602	20,484	512,545	863,926	323,746
Total Commercial	2,711		19,527	465,073	852,962	296,855	4,698	127,146		68,317	1,762	52,865	234,348	42,291	25,987	645,084	1,087,310	407,463

1/ Not considered as Utility Pole material; 35% defect factor used to compute net volume and stems.

2/ Weighted Working Group Averages were used to compute Net Volumes and Stems.

2. Walnut Creek Technical Working Group

TABLE 38

Gross Volume and Stems Per Acre for Ponderosa Pine Saplings and Pole Timber by Site and Age Classes in the Walnut Creek Working Group.

Site and Age Class	Acres	Saplings 0-4" DBH	Poletimber					
			5-7" DBH		8-10" DBH		Total	Total
		Stems	Stems	Cu. Ft.	Stems	Cu.Ft.	Stems	Cu.Ft.
Site - 1								
41-60	1,268	40	15		12	43	27	43
61-80	1,268	45	14	44	4	38	18	82
Total	2,536							
Site - 2								
41-60	3,668	44	42	56	1	9	43	65
61-80	2,033	99	41	141	30	217	71	358
81-100 1/	634				23	145	23	145
Total	6,335							
Site - 3								
41-60	1,267	135	99	87	28	156	127	243
61-80	1,900		6	8	9	43	15	51
81-100 1/	1,900		4	17	7	22	11	39
101-120 1/	634				22		22	
120+ 1/	1,900				16	120	16	120
Total	7,601							
Total Operable	16,472							
Inoperable 2/	1,870	41	24	43	14	74	38	117
Total Commercial	18,342							

1/ Virgin saplings and pole timber.

2/ Weighted working group averages.

TABLE 39

Stems Per Acre for Ponderosa Pine Sawtimber
By Site and Age Classes in the
Walnut Creek Working Group

Site and Age Class	Acres	Sawtimber 11"+ DBH			Snags
		YP	BJ	Total Stems	Stems
Site - 1					
41-60	1,268	1.55	13.15	14.70	
61-80	1,268	7.00	39.70	46.70	
Total	2,536				
Site - 2					
41-60	3,668	1.32	11.44	12.76	.64
61-80	2,033	5.35	11.76	17.11	
81-100 1/	634	5.90	3.70	9.60	
Total	6,335				
Site - 3					
41-60	1,267	18.25	10.70	28.95	4.45
61-80	1,900	4.20		4.20	.60
81-100	1,900	2.77	67.60	70.39	
101-120 1/	634	7.30	7.90	15.20	1.60
121+ 1/	1,900	14.36	16.26	30.62	
Total	7,601				
Total Operable	16,472				
Inoperable 2/	1,870	6.12	19.02	25.14	.60
Total Commercial	18,342				

1/ Virgin Stems.

2/ Weighted Working Group Averages.

TABLE 40

Gross Volume Per Acre for Ponderosa Pine Sawtimber
By Site and Age Classes in the Walnut Creek Working Group

Site and Age Class	Acres	Sawtimber 11+ DBH				Total	Total
		YP		BJ			
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Bd. Ft.	Cu. Ft.
Site - 1							
41-60	1,268	1,422	232	1,122	279	2,544	511
61-80	1,268	4,289	741	4,945	1,163	9,234	1,904
Total	2,536						
Site - 2							
41-60	3,668	1,324	214	720	190	2,044	404
61-80	2,033	1,276	538	990	258	2,266	796
81-100 1/	634	3,261	572	803	175	4,064	747
Total	6,335						
Site - 3							
41-60	1,267	3,306	710	513	151	3,819	861
61-80	1,900	1,026	208			1,026	208
81-100	1,900	479	107	578	170	1,057	277
101-120 1/	634	1,090	252	438	124	1,528	376
121+ 1/	1,900	2,108	493	625	197	2,733	690
Total	7,601						
Total Operable	16,472						
Inoperable 2/	1,870	1,730	368	976	251	2,706	619
Total Commercial	18,342						

1/ Virgin Sawtimber.

2/ Weighted Working Group Averages.

TABLE 41

Gross Volume for Ponderosa Pine Poletimber
By Site and Age Classes in the Walnut Creek Working Group

Site and Age Class	Acres	Poletimber 5-7" DBH Cu. Ft.	Poletimber 8-10" DBH Cu. Ft.	Poletimber Total Cu. Ft.
Site - 1				
41-60	1,268		54,524	54,524
61-80	1,268	55,792	48,184	103,976
Total	2,536	55,792	102,708	158,500
Site - 2				
41-60	3,668	205,408	33,021	238,429
61-80	2,033	286,653	441,161	727,814
81-100 1/	634		91,930	91,930
Total	6,335	492,061	566,112	1,058,173
Site - 3				
41-60	1,267	110,229	197,652	307,881
61-80	1,900	15,200	81,700	96,900
81-100	1,900	32,300	41,800	74,100
101-120 1/	634			
120+ 1/	1,900		228,000	228,000
Total	7,601	157,729	549,152	706,881
Total Operable	16,472	705,582	1,217,972	1,923,554
Inoperable 2/	1,870	80,410	138,380	218,790
Total Commercial	18,342	785,992	1,356,352	2,142,344

1/ Virgin Poletimber.

2/ Weighted working group average used to compute gross volume.

TABLE 42

Gross Volume for Ponderosa Pine Sawtimber
By Site and Age Classes in the Walnut Creek Working Group

Site and Age Class	Acres	Sawtimber 11" + DBH					
		YP		BJ		Total	
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Total Cu. Ft.
Site - 1							
41-60	1,268	1,803,096	294,176	1,422,696	353,772	3,225,792	647,948
61-80	1,268	5,438,452	939,588	6,270,260	1,474,684	11,708,712	2,414,272
Total	2,536	7,241,548	1,233,764	7,692,956	1,828,456	14,934,504	3,062,220
Site - 2							
41-60	3,668	4,856,432	784,952	2,640,960	696,920	7,497,392	1,481,872
61-80	2,033	2,594,108	1,093,754	2,012,670	524,514	4,606,778	1,618,268
81-100 1/	634	2,067,474	362,648	509,102	110,950	2,576,576	473,598
Total	6,335	9,518,014	2,241,354	5,162,732	1,332,384	14,680,746	3,573,738
Site - 3							
41-60	1,267	4,188,702	899,570	649,971	191,317	4,838,673	1,090,887
61-80	1,900	1,949,400	395,200			1,949,400	395,200
81-100 1/	1,900	910,100	203,300	1,098,200	323,000	2,008,300	526,300
101-120 1/	634	691,060	159,768	277,692	78,616	968,752	238,384
121+ 1/	1,900	4,005,200	936,700	1,187,500	374,300	5,192,700	1,311,000
Total	7,601	11,744,462	2,594,538	3,213,363	967,233	14,957,825	3,561,771
Total Operable	16,472	28,504,024	6,069,656	16,069,051	4,128,073	44,573,075	10,197,729
Inoper. 2/	1,870	3,235,100	688,160	1,825,120	469,370	5,060,220	1,157,530
Total Com'l.	18,342	31,739,124	6,757,816	17,894,171	4,587,443	49,633,295	11,355,259

1/ Virgin Sawtimber.

2/ Weighted working group averages used to compute gross volumes.

TABLE 43

Net Volume for Ponderosa Pine Sawtimber
By Site and Age Classes in the Walnut Creek Working Group

Site and Age Class	Acres	Sawtimber 11" + DBH				Total Scribner Bd. Ft.	Total Cu. Ft.
		YP		BJ			
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.		
Site - 1							
41-60	1,268	1,352,322	220,632	1,280,426	318,395	2,632,748	539,027
61-80	1,268	4,078,839	704,691	5,643,234	1,327,216	9,722,073	2,031,907
Total	2,536	5,431,161	925,323	6,923,660	1,645,611	12,354,821	2,570,934
Site - 2							
41-60	3,668	3,642,324	588,714	2,376,864	627,228	6,019,188	1,215,942
61-80	2,033	1,945,581	820,316	1,811,403	472,063	3,756,984	1,292,379
81-100 1/	634	1,400,882	246,601	432,737	94,308	1,838,619	340,909
Total	6,335	6,993,787	1,655,631	4,621,004	1,193,599	11,614,791	2,849,230
Site - 3							
41-60	1,267	3,141,526	674,678	584,974	172,185	3,726,500	846,863
61-80	1,900	1,462,050	296,400			1,462,050	296,400
81-100 1/	1,900	682,575	152,475	988,380	290,700	1,670,955	443,175
101-120 1/	634	469,921	108,642	236,038	66,824	705,959	175,466
121+ 1/	1,900	2,723,536	636,956	1,009,375	318,155	3,732,911	955,111
Total	7,601	8,479,608	1,869,151	2,818,767	847,864	11,298,375	2,717,015
Total Operable	16,472	20,904,556	4,450,105	14,363,431	3,687,074	35,267,987	8,137,179
Inoper.	1,870	2,373,030	504,900	1,630,640	418,880	4,003,670	923,780
Total Com'l.	18,342	23,277,586	4,955,005	15,994,071	4,105,954	39,271,657	9,060,959

1/ Virgin Sawtimber.

2/ Weighted working group averages used to compute net volumes.

3. Administrative Working Group

TABLE 44

Gross Volume and Stems Per Acre for Saplings and Poletimber By Site and Age Classes in the Administrative Working Group. 1/

Site and Age Class	Acres	Saplings 0-4" DBH	Poletimber 5-7" DBH		Poletimber 8-10" DBH		Total	Total
		Stems	Stems	Cu.Ft.	Stems	Cu.Ft.	Stems	Cu.Ft.
Site 1								
41-60	403	87	84	243	30	213	114	456
61-80	635	46	48	93	15	106	63	196
Total	1,038							
Site 2								
41-60	2,017	78	56	121	27	166	83	287
61-80	3,430	78	44	109	35	234	79	343
81-100	534	31	28	54	25	151	53	205
101-120	231							
Total	6,210							
Site 3								
41-60	836	100	68	95	37	188	105	283
61-80	1,714	52	40	96	24	115	64	211
81-100	303		4	17	7	33	11	50
101-120	100				22		22	
121+	303				16	120	16	120
Total	3,256							
Total Operable	10,506							
Inoperable 2/	4,633	66	45	102	28	171	73	273
Total Commercial	15,139							

1/ Includes 118 acres of Mixed-Conifer.

2/ Crown King Administrative Working Group which is classified as inoperable due to lack of access roads. Weighted Working Circle averages.

TABLE 45

Stems Per Acre for Sawtimber By Site and Age Classes in Administrative Working Group 1/

Site and Age Class	Acres	Sawtimber 11"+ DBH YP	BJ	Total Stems	Snags Stems
Site 1					
41-60	403	2.55	17.86	20.41	1.20
61-80	635	5.22	35.08	40.30	1.04
Total	1,038				
Site 2					
41-60	2,017	3.55	24.74	28.29	.44
61-80	3,430	3.64	27.74	31.38	.62
81-100	534	5.36	16.36	21.72	
101-120	231	2.20	4.40	6.60	3.20
Total	6,210				
Site 3					
41-60	836	7.69	15.20	22.89	1.99
61-80	1,714	2.35	8.63	10.98	.41
81-100	303	2.77	67.60	70.37	
101-120	100	7.30	7.90	15.20	1.60
121+	303	14.36	16.26	30.62	
Total	3,256				
Total Operable 2/	10,506				
Inoperable	4,633	4.19	22.86	27.05	.68
Total Commercial	15,139				

1/ Includes 118 acres of Mixed-Conifer

2/ Crown King Administrative Working Group which is classified as Inoperable due to lack of access roads.
Weighted Working Circle Averages.

TABLE 46

Gross Volume Per Acre for Sawtimber by Site and Age Classes in the Administrative Working Group 1/

Site and Age Class	Acres	Sawtimber 11"+ DBH					
		YP		BJ		Total	
		Scribner Bd.Ft.	Cu.Ft.	Scribner Bd.Ft.	Cu.Ft.	Scribner Bd.Ft.	Total Cu. Ft.
Site 1							
41-60	403	1,832	304	1,413	362	3,245	666
61-80	635	3,533	601	3,551	838	7,084	1,439
Total	1,038						
Site 2							
41-60	2,017	1,636	291	1,091	301	2,727	592
61-80	3,430	1,298	279	1,943	692	3,241	971
81-100	534	2,343	408	1,671	411	4,014	819
101-120	231	462	103	148	51	610	154
Total	6,210						
Site 3							
41-60	836	1,358	293	680	206	2,038	499
61-80	1,714	496	104	431	124	927	228
81-100	303	479	107	578	170	1,056	277
101-120	100	1,090	252	438	124	1,528	376
121+	303	2,108	493	625	197	2,733	690
Total	3,256						
Total Operable	10,506						
Inoperable 2/	4,633	1,418	277	1,356	419	2,774	696
Total Commercial	15,139						

1/ Includes 118 acres of Mixed-Conifer.

2/ Crown King Administrative Working Group which is classified as Inoperable due to lack of access roads.
Weighted Working Circle Averages.

TABLE 47

Gross Volume for Poletimber by Site and Age Classes in the Administrative Working Group 1/

Site and Age Class	Acres	Poletimber 5-7" DBH Cu. Ft.	Poletimber 8-10" DBH Cu. Ft.	Total Cu. Ft.
Site 1				
41-60	403	97,929	85,839	183,768
61-80	635	60,325	67,310	127,635
Total	1,038	158,254	153,149	311,403
Site 2				
41-60	2,017	244,057	334,822	578,879
61-80	3,430	373,870	802,620	1,176,490
81-100	534	28,836	80,634	109,470
101-120	231			
Total	6,210	646,763	1,218,076	1,864,839
Site 3				
41-60	836	79,420	157,168	236,588
61-80	1,714	164,544	197,110	361,654
81-100	303	5,151	9,999	15,150
101-120	100			
121+	303		36,360	36,360
Total	3,256	249,115	400,637	649,752
Total Operable	10,506	1,054,132	1,771,862	2,825,994
Inoperable 2/	4,633	472,566	792,243	1,264,809
Total Commercial	15,139	1,526,698	2,564,105	4,090,803

1/ Includes 118 acres of Mixed-Conifer.

2/ Crown King Administrative Working Group which is classified as Inoperable due to lack of access roads. Weighted Working Circle Averages used to compute Gross Volumes.

TABLE 48

Gross Volume for Sawtimber By Site and Age Classes in the Administrative Working Group [1/]

Site and Age Class	Acres	Sawtimber 11" + DBH					
		YP		BJ		Total	
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Total Cu. Ft.
Site - 1							
41-60	403	738,296	122,512	569,439	145,886	1,307,735	268,398
61-80	635	2,243,455	381,635	2,254,885	532,130	4,498,340	913,765
Total	1,038	2,981,751	504,147	2,824,324	678,016	5,806,075	1,182,163
Site - 2							
41-60	2,017	3,299,812	586,947	2,200,547	607,117	5,500,359	1,194,064
61-80	3,430	4,452,140	956,970	6,664,490	2,373,560	11,116,630	3,330,530
81-100	534	1,251,162	217,872	892,314	219,474	2,143,476	437,346
101-120 [2/]	231	106,722	23,793	34,188	11,781	140,910	35,574
Total	6,210	9,109,836	1,785,382	9,791,539	3,211,932	18,901,375	4,997,514
Site - 3							
41-60	836	1,135,288	244,948	568,480	172,216	1,703,768	417,164
61-80	1,714	850,144	175,256	738,734	212,536	1,588,878	390,792
81-100	303	145,137	32,421	175,134	51,510	320,271	83,931
101-120	100	109,000	25,200	43,800	12,400	152,800	37,600
121+	303	638,724	149,379	189,375	59,691	828,099	209,070
Total	3,256	2,878,293	630,204	1,715,523	508,353	4,593,816	1,138,557
Total Operable	10,506	14,969,880	2,919,933	14,331,386	4,398,301	29,301,266	7,318,234
Inoper. [3/]	4,633	6,569,594	1,283,341	6,282,348	1,941,227	12,851,942	3,224,568
Total Com'l.	15,139	21,539,474	4,203,274	20,613,734	6,339,528	42,153,208	10,542,802

1/ Includes 118 acres of mixed-conifer.

2/ Inadequate samples in Site - 1, 101-120 Age Class. The Age Class was combined with the Site - 2, 101-120 Age Class.

3/ Crown King Administrative Working Group which is classified as inoperable due to lack of access roads. Weighted working circle averages used to compute gross volumes.

TABLE 49

Net Volume for Sawtimber By Site and Age Classes in the Administrative Working Group 1/

Site and Age Class	Acres	Sawtimber 11"+ DBH					
		YP		BJ		Total	
		Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Cu. Ft.	Scribner Bd. Ft.	Total Cu. Ft.
Site 1							
41-60	403	553,722	91,884	512,495	131,297	1,066,217	223,181
61-80	635	1,682,591	286,226	2,029,396	478,917	3,711,987	765,143
Total	1,038	2,236,313	378,110	2,541,891	610,214	4,778,204	988,324
Site 2							
41-60	2,017	2,474,859	440,210	1,980,492	546,405	4,455,351	986,615
61-80	3,430	3,339,105	717,728	5,998,041	2,136,204	9,337,146	2,853,932
81-100	531	938,372	163,404	803,083	197,527	1,741,455	360,931
101-120 2/	231	80,042	17,845	30,769	10,603	110,811	28,448
Total	6,210	6,832,398	1,339,187	8,812,385	2,890,739	15,644,763	4,229,926
Site 3							
41-60	836	851,466	183,711	511,632	154,994	1,363,098	338,705
61-80	1,714	637,608	133,692	664,861	191,282	1,302,469	324,974
81-100	303	108,853	24,316	157,621	46,359	266,474	70,675
101-120	100	81,750	18,900	39,420	11,160	121,170	30,060
121+	303	479,043	112,034	170,438	53,722	649,481	165,756
Total	3,256	2,158,720	472,653	1,543,972	457,517	3,702,692	930,170
Total Operable 3/	10,506	11,227,411	2,189,950	12,398,248	3,958,470	24,125,659	6,148,420
In-operable	4,633	4,467,324	872,672	5,339,996	1,650,043	9,807,320	2,522,715
Total Com'l.	15,139	15,694,735	3,062,622	18,238,244	5,608,513	33,932,979	8,671,135

1/ Includes 118 acres of mixed-conifer.

2/ Inadequate samples in Site-1, 101-120 Age Class, the Age Class was combined with the Site-2, 101-120 Age Class.

3/ Crown King Administrative Working Group which is classified as inoperable due to lack of access roads. Weighted Working Circle averages used to compute net volume.

TABLE 50

Defect Factors used to Derive Net Volumes *

Product	Species	Virgin Defect %	Virgin Defect Factor	Cutover Defect %	Cutover Defect Factor
Sawtimber	Yellow Pine	32	68	25	75
	Black Jack	15	85	10	90
	Douglas-fir	30	70	25	75
	White Fir	40	60	35	65
Utility Poles (cull allowance)	Ponderosa Pine			27	73
	Douglas-fir			30	70
	White Fir	(Not considered as pole material)			

* Virgin Defect % was used to derive Net Volumes for all inoperable Sawtimber.

F. COMPETING SPECIES

TABLE 51

Competing Species in the Prescott Technical Working Group*

Site and Age Class	Acres	0-4 DBH Stems	5-10 DBH Stems	11"+ DBH Stems	Total Per Acre	Total for Age Class
Site - 1						
41-60	835	163	7		170	141,950
61-80	1,392	25	76	8	109	152,055
101-120	139	48			48	6,672
Total	2,206					300,677
Site 2						
41-60	6,264	99	46	12	157	983,448
61-80	12,111	163	44	5	212	2,567,532
81-100	1,810	160	32	12	204	369,240
101-120	420	422	48	25	495	207,900
Total	20,705					4,128,120
Site - 3						
41-60	2,646	309	31	5	337	891,702
61-80	5,430	182	61	10	253	1,373,790
Total	8,076					2,265,602
**Nonstocked	3,006	840	102	1	943	2,834,658
Total Operable	34,053					9,529,057
***Inoperable	24,915	162	46	8	216	5,381,640
Total Commercial	58,968					14,910,697

* Competing species consist of all species with the exception of ponderosa pine, white fir and Douglas-fir.

** Estimated - Burned areas.

*** Weighted working group averages.

TABLE 52

Competing Species in the Walnut Creek Technical Working Group

Site and Age Class	Acres	0-4 DBH Stems	5-10 DBH Stems	11 + DBH Stems	Total Per Acre	Total Per Age Class
Site - 1						
41-60	1,268			4	4	5,072
61-80	1,268	23	47	10	80	101,440
Total	2,536					106,512
Site 2						
41-60	3,668	14	78	9	101	370,468
61-80	2,033		26	3	29	58,957
81-100	634			12	12	7,608
Total	6,335					437,033
Site - 3						
41-60	1,267	65	7	9	81	102,627
61-80	1,900	142	36	9	187	355,300
81-100	1,900	46	28	4	78	148,200
101-120	634	235	54	2	291	184,494
121+	1,900	234	39	6	279	530,100
Total	7,601					1,320,721
Total Operable	16,472					1,564,266
*Inoperable	1,870	67	37	7	111	207,570
Total Commercial	18,342					2,071,836

* Weighted working group averages.

TABLE 53
Compartment Examination Schedule and Budget of Entry
Prescott Working Circle
F.Y. 1965

Block or District Name	Compartment No.	Compartment Name	Purpose of Next Entry Into Compartment: Anticipated Type of Stand Treatment	Net National Forest Acres	Budget Control: *Budget Acres	Budget Year
Prescott	404.03	School House	National Timber Inventory	1,541		1965
"	405.01	Indian	National Timber Inventory	1,481		1965
"	411.01	Watson Spring	Noncommercial Thinning	1,092	400	1965-68
"	411.02	Big Bug	" "	1,395	400	1965-68
"	411.03	Rough	" "	1,103	100	1965-68
"	412.01	Dandrea	" "	921	300	1965-68
"	412.02	Yanke Doodle	Sawtimber & Utility Pole Intermediate-Cut	889		1968-70
"	413.02	Venezia	" "	1,142		1968-70
"	418.03	Palace Station	" "	1,732		1968-70
"	418.04	Bodie Spring	" "	1,398		1968-70
"	419.01	Turkey Creek	" "	1,304		1968-70
"	419.02	Spring	" "	1,575		1968-70
"	419.03	Goodwin	" "	1,353		1968-70
Walnut Creek	602.08	North Gobbler Knob	Sawtimber Intermediate-Cut	643		1965-66
" "	603.02	East Gobbler Knob	" "	789		1965-66
" "	603.06	Mud Spring	" "	1,119		1965-66
" "	604.01	Baca	" "	429		1965-66
" "	604.02	Gobbler Knob	" "	320		1965-66
" "	604.03	Trail	" "	695		1965-66
" "	605.01	Juniper Mesa	" "	850		1965-66
" "	618.02	Connell	Noncommercial Thinning	1,185	300	1965-70
" "	612.01	Flat Top	Sawtimber Intermediate-Cut	603		1967-70
" "	612.02	Cement Springs	" "	502		1967-70
" "	613.01	Pinyon	" "	990		1967-70
Walnut Creek	613.02	Slingshot	Sawtimber Intermediate-Cut	1,013		1967-70
" "	614.01	Dead Steer	" "	897		1967-70
" "	614.02	Granite Knob	" "	1,143		1967-70
" "	614.03	Hyde Mtn.	" "	1,032		1967-70
" "	619.01	Puma	" "	432		1967-70
" "	619.02	Paddock	" "	1,146		1967-70
" "	620.01	Stringtown	" "	798		1967-70
" "	620.02	Stinson	" "	1,115		1967-70
" "	620.03	Pine Flat	" "	1,060		1967-70
" "	620.04	Camp Wood	" "	1,033		1967-70
" "	615.01	Carter	" "	847		1971-74
" "	615.02	Apache Springs	" "	1,038		1971-74
" "	615.03	Pinetop	" "	1,298		1971-74
" "	615.04	Seven-Up	" "	997		1971-74
" "	615.05	Camp Wood Mtn.	" "	1,169		1971-74
" "	616.01	Pine Creek	" "	1,100		1971-74
" "	616.02	Antelope	" "	1,045		1971-74
" "	616.03	Triangle HC	" "	955		1971-74
" "	617.01	Yolo	" "	821		1971-74
" "	617.02	Stubbs	" "	1,143		1971-74
" "	618.01	Switch Back	" "	960		1971-74

* Net National Forest Acres is Budgeted Acres unless otherwise specified.

TABLE 54
Compartment Examination Schedule and Budget of Entry
Prescott Working Circle
F.Y. 1966

Block or District Name	Compartment No.	Compartment Name	Purpose of Next Entry Into Compartment: Anticipated Type of Stand Treatment	Net National Forest Acres	Budget Control: *Budget Acres	Budget Year
Walnut Creek	618.03	Connell Gulch	Intermediate Cut	1,102		1971-74
" "	602.02	Sec. 18	Multiple Use Coordination	730		
" "	602.04	New Water	" "	275		
" "	602.05	Sec. 19 Well	" "	482		
" "	602.06	Happy Camp	" "	448		
" "	602.07	Red Mtn.	" "	410		
" "	603.03	Sec. 33 Tank	" "	645		
" "	603.04	Cienega	" "	273		
" "	603.05	Pine Flat	" "	608		
" "	605.02	East Juniper Mesa	" "	835		
" "	608.01	North Fork	" "	1,429		
" "	608.02	Hillside	" "	1,078		
" "	608.03	Red Tank	" "	1,358		
" "	608.04	Pot Hole	" "	1,073		
" "	608.05	South Fork	" "	1,243		
" "	609.01	Two Iron	" "	1,248		
" "	609.02	Little Old Spring	" "	1,020		
" "	609.03	Panther Spring	" "	1,194		
" "	609.04	Apache Creek	" "	1,095		
" "	610.01	Graver	" "	205		
Granite	309.01	Granite Basin Lake	Noncommercial Thinning	901	20	1965-68
"	317.03	Copper Basin	" "	1,882	100	1969-70
"	318.01	Cold Spring	" "	1,328	260	1969-70
Prescott	406.02	Wolf	Site Preparation-Seeding	1,095	600	1969
"	406.03	Pay Off	Noncommercial Thinning	1,392	400	1969-70
Prescott	414.01	Dosoris	Noncommercial Thinning	815	400	1969-70
"	407.04	Hassayampa	" "	725	100	1971-72
"	402.01	Bannie	" "	1,098	150	1972-74
"	403.02	Benjamin Gulch	" "	987	150	1972-74
"	403.03	Antelope	" "	1,056	150	1972-74
"	403.04	Sawmill Gulch	" "	1,322	150	1972-74
"	401.01	Lynx	Multiple Use Coordination	1,074		
"	401.02	Government Canyon	" "	606		
"	402.02	Chaparral	" "	1,336		
"	402.03	Rock Springs	" "	1,172		
"	402.04	Goat	" "	1,145		
"	403.01	Rattlesnake Spring	" "	954		
"	403.05	Charcoal	" "	1,203		
"	404.01	Goldwater	" "	1,583		
"	404.02	Bannon	" "	1,101		
"	405.02	Groom Creek	" "	1,345		
"	406.01	Ruth	" "	814		
"	407.01	Dove	" "	495		
"	407.02	Spruce Mtn.	" "	1,154		
"	407.03	Womatochick	" "	1,292		

* Net National Forest Acres is Budgeted Acres unless otherwise specified.

TABLE 55
Compartment Examination Schedule and Budget of Entry
Prescott Working Circle
F.Y. 1967

Block or District Name	Compartment No.	Compartment Name	Purpose of Next Entry Into Compartment: Anticipated Type of Stand Treatment	Net National Forest Acres	Budget Control: *Budget Acres	Budget Year
Prescott	407.05	Mt. Tritle	Multiple Use Coordination	410		
"	407.06	Cash	" "	609		
"	408.01	North Walker	" "	680		
"	408.02	South Walker	" "	681		
"	408.03	Eugene	" "	1,208		
"	408.04	Mt. Davis	" "	960		
"	408.05	Shoe String	" "	773		
"	410.01	Grapevine Spring	" "	980		
"	413.01	Senator	" "	1,242		
"	414.02	Golden Eagle	" "	1,205		
"	415.01	East Copper Creek	" "	493		
"	415.02	Scotty	" "	979		
"	415.03	Maverick	" "	612		
"	418.01	Cross L	" "	1,062		
"	418.02	Quail Spring	" "	532		
"	420.01	Crystal	" "	1,069		
Granite	308.01	Granite Mtn.	Intermediate Cut	1,137		1971
"	310.01	Colwell Spring	" "	504		1971
"	311.01	Iron Springs	" "	833		1971
"	313.01	Sugar Mtn.	" "	925		1971
"	313.02	Canfield Spring	" "	661		1971
"	314.01	Alto	" "	1,075		1971
"	314.02	Abandon	" "	1,020		1971
"	314.03	Highland Pines	" "	340		1971
"	315.01	Railroad	" "	772		1971
Granite	315.02	Spencer Spring	Intermediate Cut	705		1971
"	315.03	Deering	" "	888		1971
"	317.02	Williams	" "	840		1971
"	319.01	Aspen Creek	" "	870		1971
"	319.02	West Granite Creek	" "	1,645		1971
"	320.01	Little	" "	559		1971
"	320.02	Granite Creek	" "	612		1971
"	321.01	Southern	" "	1,260		1971
"	315.04	East Granite Creek	" "	578		1971
"	325.03	Porter Mtn.	" "	675		1971
"	317.01	Thumb Butte	Noncommercial Thinning	1,260	300	1972-74
"	325.01	Private	" "	310	200	1972-74
"	325.02	Willow	" "	855	400	1972-74
"	313.03	West Copper Creek	Intermediate Cut	1,767		1974
Chino Valley	117.01	South Mingus	Site Preparation-Seeding	1,395	150	1974
"	120.01	Black Canyon	" " "	908	600	1974
"	120.02	Brindle Pup	" " "	1,085	150	1974
"	121.01	Kendall	" " "	890	700	1974
"	122.01	Pine Flat	" " "	818	100	1974
"	122.02	Tiny	" " "	895	100	1974

* Net National Forest Acres is Budgeted Acres unless otherwise specified.

TABLE 56
Compartment Examination Schedule and Budget of Entry
Prescott Working Circle
F.Y. 1968

Block or District Name	Compartment No.	Compartment Name	Purpose of Next Entry Into Compartment: Anticipated Type of Stand Treatment	Net National Forest Acres	Budget Control: *Budget Acres	Budget Year
Chino Valley	110.01	Hickey	Multiple Use Coordination	1,047		
"	111.01	South 89	" "	630		
"	112.01	Haywood	" "	910		
"	113.01	North Mingus	" "	260		
"	114.01	Rim	" "	430		
"	115.01	Sims	" "	978		
"	116.01	Lookout	" "	779		
"	118.01	Yaeger	" "	323		
"	118.02	Marginal	" "	390		
"	119.01	Mogen David	" "	1,008		
"	121.02	Ash Creek	" "	1,068		
"	123.01	Log Springs	" "	220		
"	124.01	Powell Springs	" "	450		
Verde	501.01	Woodchute Mtn.	" "	1,540		
"	502.01	Divided	" "	570		
"	502.02	Power	" "	830		
Crown King	202.01	Pine Springs	" "	1,425		
"	202.02	North Battle Flat	" "	240		
"	204.01	Green House	" "	1,732		
"	206.01	West Pine Creek	" "	1,179		
"	206.02	Buster	" "	857		
"	206.03	Gold King	" "	1,058		
"	206.04	South Battle Flat	" "	275		
"	207.01	Horse Mtn.	" "	1,005		
"	208.01	Orr	" "	690		
Crown King	208.02	Tuscumbia	Multiple Use Coordination	809		
"	208.03	Towers	" "	938		
"	208.04	Wild Flower	" "	685		
"	208.05	Del Pasco	" "	780		
"	209.01	Firebland	" "	1,400		
"	209.02	Springfield	" "	1,165		
"	209.03	Shelly	" "	370		
"	209.04	Minnehaha	" "	820		
"	210.01	Crown King	" "	1,090		
"	210.02	Wasson	" "	1,172		
"	211.01	Lincoln	" "	852		
"	211.02	Flagpole	" "	1,150		
"	212.01	Hells Hole	" "	1,068		
"	212.02	Algonquin	" "	960		
"	212.03	South Fort	" "	1,272		
"	212.04	Sullivan Spring	" "	765		
"	212.05	Oro Belle	" "	300		
"	213.01	Hirsch	" "	988		
"	213.02	Luke's Hoist	" "	1,320		
"	213.03	Lane Mtn.	" "	1,020		

* Net National Forest Acres is Budgeted Acres unless otherwise specified.

TABLE 57

Compartment Examination Schedule and Budget of Entry
Prescott Working Circle
F.Y. 1969

Block or District Name	Compartment No.	Compartment Name	Purpose of Next Entry Into Compartment: Anticipated Type of Stand Treatment	Net National Forest Acres	Budget Control: *Budget Acres	Budget Year
Crown King	213.04	Whiskey Spring	Multiple Use Coordination	1,140		
"	214.01	Dead Cow Spring	" "	1,052		
"	214.02	Twin Peaks	" "	1,148		
"	214.03	Horsethief	" "	1,139		
"	214.04	East Fort	" "	1,239		

* Net National Forest Acres is Budgeted Acres unless otherwise specified.

G. RECORDS

1. Record of Timber Cut

TABLE 58

Annual Cuts of Timber, 1920 to December 1963

Year	Volume Bd. Ft.	Year	Volume Bd. Ft.	Utility Poles Board Feet	Utility Poles Pieces
1920	154,000	1936	201,000		
1921	36,000	1937	152,000		
1922	327,000	1938	200,000		
1923	97,200	1939	124,000		
1924	200,000	1940	159,000		
1925		1941	231,000		
1926	164,000	1942	165,000		
1927	100,000	1955	1,205,000	126,000	3,921
1928	264,000	1956	2,016,000	211,000	5,985
1929	202,000	1957	1,838,000	249,000	9,156
1930	16,000	1958	1,390,000	167,000	5,089
1931	20,000	1959	2,825,000	166,000	2,008
1932	10,000	1960	2,364,000	40,000	1,559
1933	37,000	1961	3,241,000	316,000	5,984
1934		1962	2,303,000	237,000	5,336
1935	18,400	1963	3,317,000	142,000	4,227
Sub-Totals	1,547,130		21,731,000	1,654,000	
Total		24,932,130			43,263

2. Fire Statistical Summary

TABLE 59

Fire Statistics

Year	No. Fires By Size Class					No. Fires By Causes			National Forest Acres Burned
	A	B	C	D	E	Light-ning	Timber	Other M.C.	
1954	34	20				38		16	39
1955	26	2			2	18		12	19,155
1956	84	23	1		2	81		29	15,066
1957	30	7	1			31		7	26
1958	49	9	3		1	48		14	380
1959	76	16	2			78	1	15	58
1960	102	12	4	1	1	94	1	25	947
1961	100	13	5			105		13	175
1962	119	11	2			109	1	22	59
1963	52	11				50		13	14
Total	672	124	18	1	6	652	3	166	35,919

Annual Average Acreage Burned = 3,592

3. RECORD OF SAWTIMBER AND AREAS CUT
Prescott Working Group
Prescott Working Circle
F.Y. 1965 to F.Y. 1971, Inclusive

Fiscal Year	Compartment No.	Area Set Up for 0 - 20 Year Age Class	Reproduction Cuts: Area Acres	Reproduction Cuts: Volume Regulated: Mbf Scribner	Reproduction Cuts: Volume Regulated: Mcf	Intermediate Cuts: Area Acres	Intermediate Cuts: Volume Regulated: Mbf Scribner	Intermediate Cuts: Volume Regulated: Mcf	Unregulated Cut: Volumes: Mbf Scribner	Unregulated Cut: Volumes: Mcf	Total Cut: Area Acres	Total Cut: Volumes: Mbf Scribner	Total Cut: Volumes: Mcf
19__	___												
	___												
	___												
19__	Total												
19__	___												
	___												
19__	Total												
Cumulative Total -													

4. RECORD OF SAWTIMBER AND AREAS CUT

Walnut Creek Working Group
Prescott Working Circle
F.Y. 1965 to F.Y. 1971, Inclusive

Fiscal Year	Compartment No.	Area Set Up for 0 - 20 Year Age Class	Reproduction Cuts: Area Acres	Reproduction Cuts: Volume Regulated: Mbf Scribner	Reproduction Cuts: Volume Regulated: Mcf	Intermediate Cuts: Area Acres	Intermediate Cuts: Volume Regulated: Mbf Scribner	Intermediate Cuts: Volume Regulated: Mcf	Unregulated Cut: Volumes: Mbf Scribner	Unregulated Cut: Volumes: Mcf	Total Cut: Area Acres	Total Cut: Volumes: Mbf Scribner	Total Cut: Volumes: Mcf
19__	___												
	___												
	___												
19__	Total												
19__	___												
	___												
19__	Total												
Cumulative Total -													

5. RECORD OF UTILITY POLES AND AREAS CUT

Prescott Working Group
Prescott Working Circle
F.Y. 1965 to F.Y. 1971, Inclusive

Fiscal Year	Com-partment No.	Volume Regulated				Unregulated Cuts				Total Cut			
		Area Acres	Scribner Mbf	Mcf	No. Pieces	Area Acres	Scribner Mbf	Mcf	No. Pieces	Area Acres	Scribner Mbf	Mcf	No. Pieces
1969 Total													
1971 Total													

Annual Report to Forest Supervisor of Areas Where Control Measures Have Been Taken and Where Control Measures Will be Needed to Protect Reforestation Projects and For Regeneration Areas

For F.Y. ____ Through F.Y. ____

_____ Working Circle

_____ National Forest

F.Y. When Control Should Be Effective	Block (District)		Compartment			Domestic Livestock				Fencing Required				Game Animals				Rodents						Totals	
	Name	Number	Name	Net Acres in Compartment	Name of Map No.	Range Allotment	Kind of Livestock	No. of Acres	Recommended Control Action	Period for Preliminary Concentrated Use	Probable Period For Deferment of Use	Construction Miles	Construction Est. Cost	Maintenance Miles	Maintenance Est. Cost	Kind of Game Animal	No. of Acres	Recommended Control Action	Probable Period For Deferment of Use	Kind of Rodent	No. of Acres	Recommended Control Action	Date for first Effort	Date for Followup Effort	Est. Cost	Acres	Est. Cost

Areas Where Control Action has been taken or has been scheduled.

H. Maps

1. Chino Valley Block Compartment Map.

2. Crown King Block Compartment Map.

3. Granite Block Compartment Map.

4. Prescott Block Compartment Map.

5. Verde Block Compartment Map.

6. Walnut Creek Block Compartment Map.

7. Chino Valley Block Working Group Map.

8. Crown King Block Working Group Map.

9. Granite Block Working Group Map.

10. Prescott Block Working Group Map.

11. Verde Block Working Group Map.

12. Walnut Creek Block Working Group Map.

13. Granite and Prescott Blocks Sawtimber Harvest Program and Transportation Map.

14. Walnut Creek Block Sawtimber Harvest Program and Transportation Map.

15. Chino Valley Block Timber Stand Improvement Program Map.

16. Granite Block Timber Stand Improvement Program Map.

17. Prescott Block Timber Stand Improvement Program Map.

18. Walnut Creek Block Timber Stand Improvement Program Map.

19. Chino Valley Block Reforestation Program Map.

20. Prescott Block Reforestation Program Map.

21. Walnut Creek Block Reforestation Program Map.